

USDA PRIME DESIGN

Sustainability-minded landscape architects at a federal government agency want to use their choice real estate on the National Mall as a showcase. **By Linda McIntyre**

THE U.S. DEPARTMENT of Agriculture is better known for beef ratings and corn subsidies than for sustainable landscape design. But a couple of the agency's landscape architects are trying to change that by tapping into a network of like-minded professionals and students.

Last November these landscape architects brought a group together in a one-day charrette to brainstorm options for making the agency's Whitten Building headquarters into a showcase for sustainable landscape design. Now Matt Arnn, acting chief landscape architect for the U.S. Forest Service, and Bob Snieckus, national landscape architect for the Natural Resources Conservation Service (both of these agencies are part of USDA), are working overtime to meld those ideas into a single concept plan for the site.

The neoclassical Whitten Building, built in two phases in the early 20th century, is the only government agency facility on the National Mall, so its staff has a unique opportunity not only to introduce sustainable design onto a

beloved if hurting landscape (see "Pall Over the Mall," *Landscape Architecture*, April 2007) but also to reach the 25 million visitors from around the world who come to the heart of Washington every year, many of them disembarking from the city's subway system at the southeast corner of the Whitten Building.

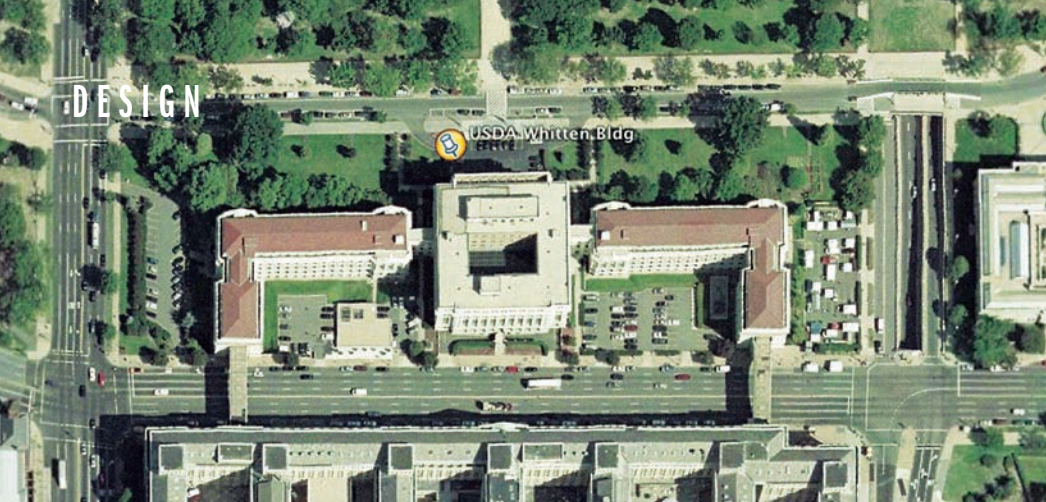
Its existing six-acre landscape might be described as standard government issue: Shrubs have been pollarded or tortured into tight "meatballs" and other formal hedge shapes regardless of their natural blowsiness. Specimen trees, some healthy but many not—even a recently planted Norway maple, listed on USDA's databases as invasive—dot an expanse of manicured lawn. Planting beds and the steep slopes rising up from a de facto "moat" around the building's perimeter are draped in English ivy, another invasive.

Pavement abounds, none of it porous, most of it devoted to parking despite the bus and subway stops just outside the building's entrance. Tiny plaques, memorials to USDA people or events, are scattered here and there.

The Whitten Building, above, sits on the National Mall, but its landscape, below from left, including dreary security planters, a steeply-sloped "moat," and tiny scattered memorial plaques, leaves much to be desired.



COURTESY U.S. DEPARTMENT OF AGRICULTURE. ALL



The classical grandeur of the main entrance is marred by asphalt, parked cars, and a yellow-and-black-striped entry arm. Leaving aside a few exceptional spots—some gorgeous mature ginkgoes and other trees near the northwest corner of the building, a little green roof on a utility outbuilding at the back, a seasonal farmers' market—this landscape is not only not sustainable, but most of it is humdrum and some is downright ugly.

It's expensive too. Bedding plants—spring bulbs, summer flowers, and cold-tolerant annuals—are switched out three times every year, contributing to annual maintenance costs of more than \$240,000. And this uninspired landscape requires more than 30,000 gallons of water every summer.

USDA employees have for years initiated sustainability projects through informal "green teams" at agency outposts throughout the country. The green team for the Whitten Building hit on the notion of using their high-profile landscape to implement such policies in a tangible way, but they needed help managing the design process. Ed Hogberg and Ed Murtagh, both enthusiastic green team members working in the Office of Operations—the make-or-break place for big agency projects—refined the notion of using the landscape to make their policies visible into a proposed agency-wide partnership. This would not only help ensure viability of the project over the longer term but also serve as a model for other public institutions.

When they approached Forest Service Recreation Director Jim Bedwell, who had previously served as that agency's chief landscape architect, to discuss what his staff might be able to contribute, Bedwell suggested that a landscape architect was integral to the project and arranged for Arnn, then based in New York City, to come on board for the project. Arnn pulled in Snieckus after learning about his work from another green team member, and they decided to broaden the effort beyond the agency with a one-day charrette.

"We reached out to friends and contacts," including other landscape architects, architects, horticulturists, landscape architecture students, and people interested in the Mall, says Arnn. They wanted to identify people who would be champions for the project, both

Abundant parking, *left*, looks ugly and contributes to drainage problems. Landscape architect Matt Arnn and USDA's John Crew, *below*, led participants on a tour before the charrette began in earnest.

within and outside USDA, hoping to draw together about 30 people. "So we invited 40," says Snieckus, "and 75 showed up."

TO MAKE THE BEST USE of their limited time, Arnn and Snieckus broke the group into seven teams, each led by a facilitator and assigned to brainstorm ideas for a different chunk of the Whitten landscape. Participants were encouraged, however, to think beyond the boundaries of their zones. Each team comprised a mix of design professionals, advocates for the Mall, students, and government employees. Time was tight—the teams only had about two and a half hours to bang out a concept after a tour of the whole site and a quick investigation of their own parcels.

Completing the whole charrette in a day "would not have been our first choice," says Arnn, but taking more time out of the office would have been burdensome or impossible for most professionals. Some, though, would have liked more time. "The creativity was just getting going when the time was up," says landscape architect Ann English. "I found myself drawing up ideas the whole way home!" Focusing the teams on small parts of the landscape, rather than the site as a whole, also involved some trade-offs for Arnn and Snieckus as they knitted the components into a single concept plan. But Arnn notes that it's hard to get a handle on such a large site in such a small amount of time, and he says that the approach got them a higher level of detail than might have been expected.

Several consistent problem areas emerged. The amount of space allocated to parking

Goals for the Charrette

- 1 Reduce stormwater runoff with rain gardens, green roofs, and bioretention practices.
- 2 Create new habitat with pollinator gardens.
- 3 Educate the public with interpretive signage and interactive features.
- 4 Reduce maintenance costs with high-performing native plants.
- 5 Feature USDA agencies with thematic elements and plants.
- 6 Improve the visual quality of the headquarters landscape.
- 7 Provide learning opportunities for children.
- 8 Organize and provide for a living memorial to people and events important to USDA's history and mission on site.
- 9 Enhance farmers' market operations and site integration.





The existing landscape is not in keeping with the building's grand classical entrance, *left*. USDA staff "green teams" have already implemented some sustainable features such as this green roof, *right*, on a utility building.

seemed preposterous to many in light of the subway and bus stops on site, and it's a visual blight on the landscape. The slopes around the "moat" are too steep; even the invasive ivy planted on them is performing poorly, and the slopes are not used to best effect given their visibility from inside the building. The memorial plaques lack impact in their current configuration. The landscape is not inviting and doesn't reflect the agency's identity or mission, and it neither befits nor takes advantage of its prime real estate on the National Mall.

Highlights from Each Zone Team

NORTHWEST ZONE *(please see graphic on page 4.)*

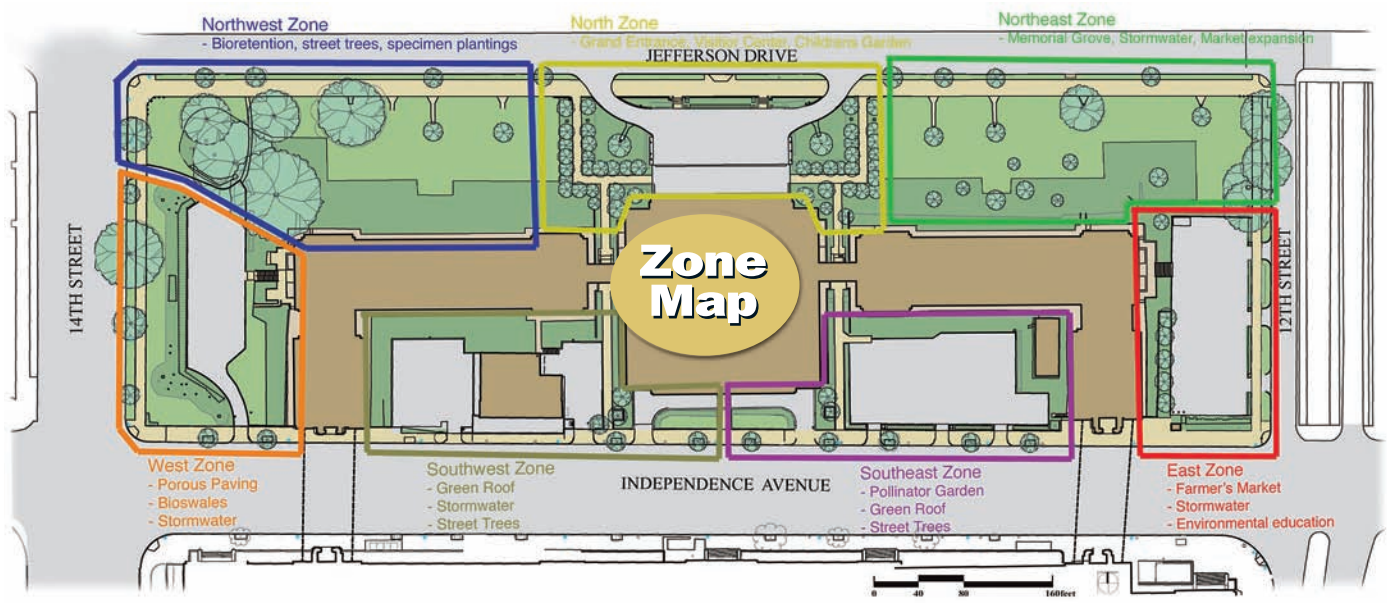
This zone at the front corner of the building has good views to the Mall and is well situated to be seen by visitors strolling among the monuments. It's perhaps the most attractive part of the existing landscape, owing mostly to some big and healthy specimen trees,

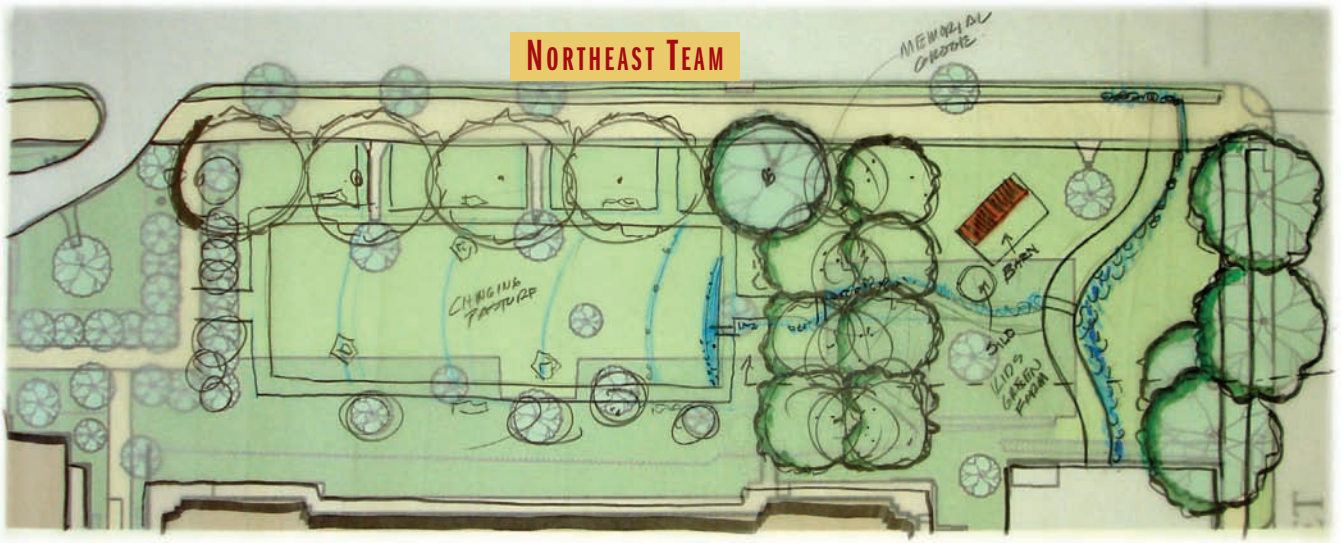
including a pair of ginkgoes, a linden, a bald cypress, and a white oak, growing in a swath of good soil. Beyond these trees the landscape features include lawn, ivy, and tightly pruned shrubs.

The group envisaged a more lushly planted landscape of native and edible plants with a more varied topography to add interest, direct and infiltrate runoff, and teach visitors about stormwater management. The informality of the planting design would be offset by a lawn to keep the landscape sympathetic to the building and provide a space for gathering and play. The group suggested adding seating and realigning the sidewalk along Jefferson Drive, removing the declining street trees along the curb and planting them instead on the USDA landscape where they would be more likely to grow and thrive, providing pedestrians with much-needed shade.

NORTH ZONE *(please see graphic on page 4.)*

This is the grand main entrance to the building, looking out onto the Mall and the Smithsonian Museum of American History on the Mall's north side. Its current treatment is more in line with a suburban McMansion, though, than a grand government edifice. The group





NORTHEAST TEAM

felt that the formality of the planting is in keeping with the style of the building, but the dominance of the parking lot and overzealous maintenance of the plants greatly reduces its visual impact.

The group suggested a symmetrical but less-clipped planting scheme and reducing the visibility of parking by offering less of it and putting remaining cars on a lower grade behind a ha-ha wall. Like several other groups, this one recommended easing the slope around the moat with terracing and bioremediation measures.

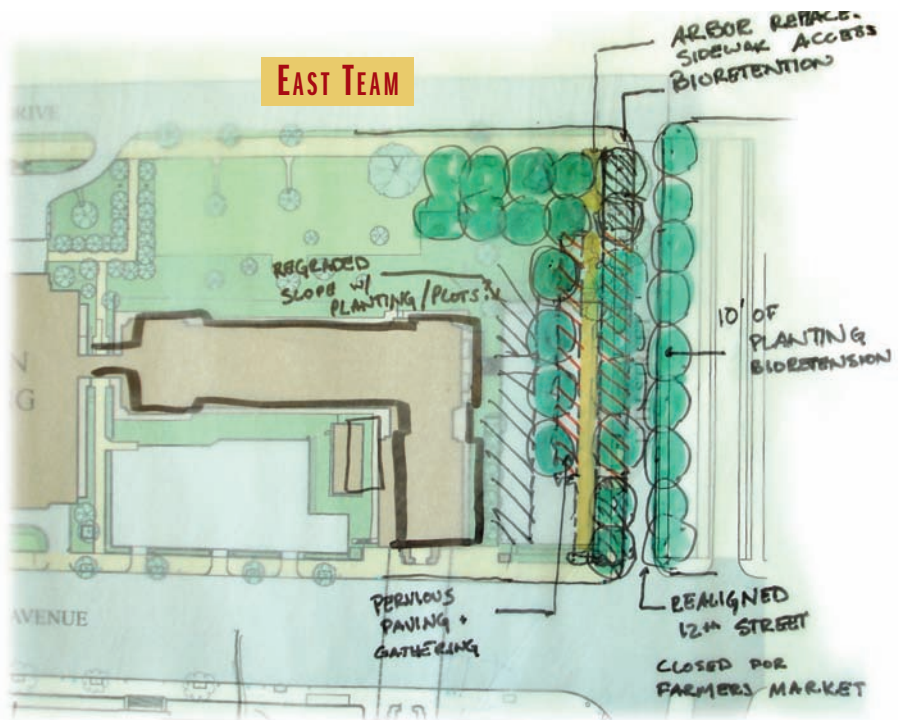
NORTHEAST ZONE

This site, in the path of visitors walking from the subway stop to the Mall and host to a Tourmobile stop, has high visibility, but it's a design hodgepodge. Many of the street trees are in decline or missing, and numerous memorial trees, a vegetable plot, and a small temporary road into an adjacent parking lot neither stand as a coherent landscape nor enhance the building.

The group felt that the prominence of the site should encourage creative exploration. They proposed a child-friendly design loosely organized on a farm theme, with edible plants, a model of a barn and "pasture" for play, and a memorial grove of trees.

EAST ZONE

This site greets visitors as they step outside the subway, and the group lamented its current state as "an assault on the image and integrity of the USDA." It's mostly pavement and serves as a parking lot as well as the site of a seasonal farmers' market open to the public.



EAST TEAM



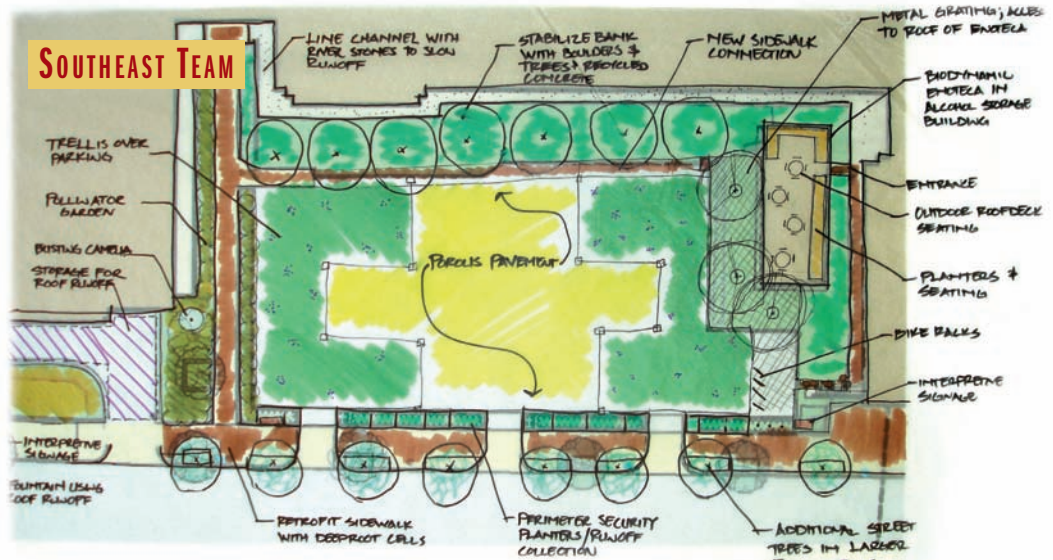
EAST TEAM

Bold ideas included shutting down a street, above, for the popular farmers' market. Most concepts included ideas for infiltrating, left, and storing stormwater on site, page 6, bottom right.



DESIGN

The Southeast team, above, sought to improve rather than eliminate parking, right.



SOUTHEAST ZONE

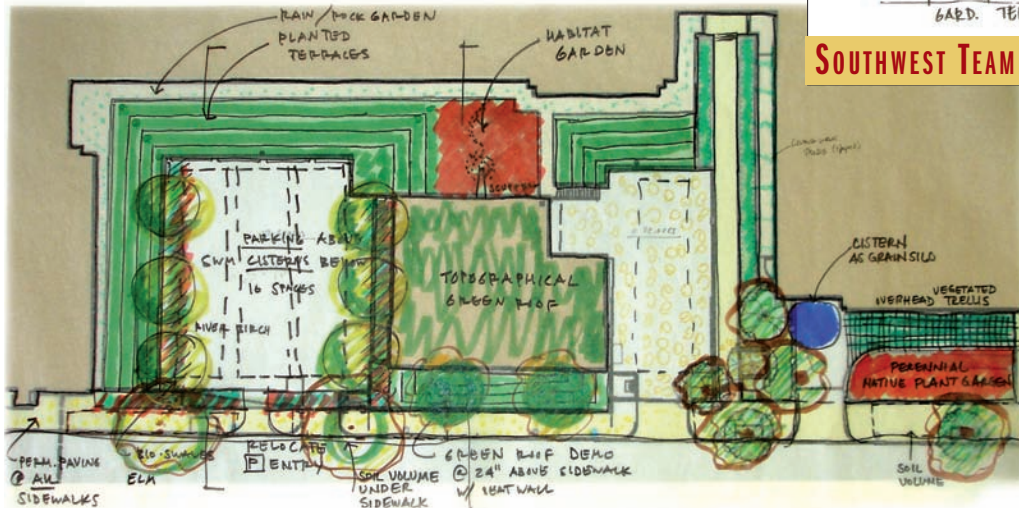
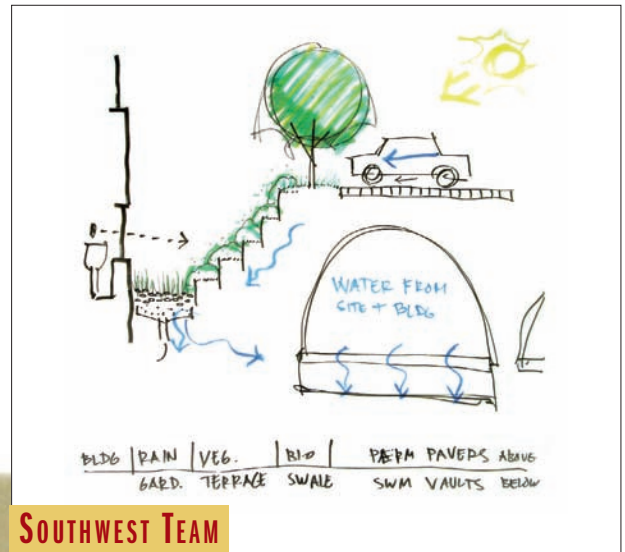
This site at the rear of the building features extensive paving and parking, as well as the usual ivy-covered slopes down to the moat and unhealthy street trees. The uninviting Americans with Disabilities Act-compliant building entrance is here. There's also a small abandoned outbuilding once used to store alcohol and other flammable liquids when there were research labs on site.

The group decided to keep some parking on the site but add bike racks and repave the space with reflective porous concrete to infiltrate stormwater and mitigate the urban heat island effect that plagues this area in summer. They would fit the edges of the parking lot with a trellis planted with organic grapevines, spiff up the building's ADA-compliant entrance with new plants, and install deep root cells under the sidewalk to promote healthier street trees. The alcohol storage building would be cheekily resurrected as a wine bar with a planted roof deck.

The group felt that this zone had the worst visual quality of the entire site, and they sought to improve its aesthetics while keeping its essentially utilitarian function. They suggested tilting up the green roof a bit to make it more visible and continuing its planting scheme in an educational display closer to ground level. Cisterns to collect runoff from this and other zones would be added underground and possibly aboveground too. The slope down to the moat would be terraced and rain gardens would be planted at the bottom.

SOUTHWEST ZONE

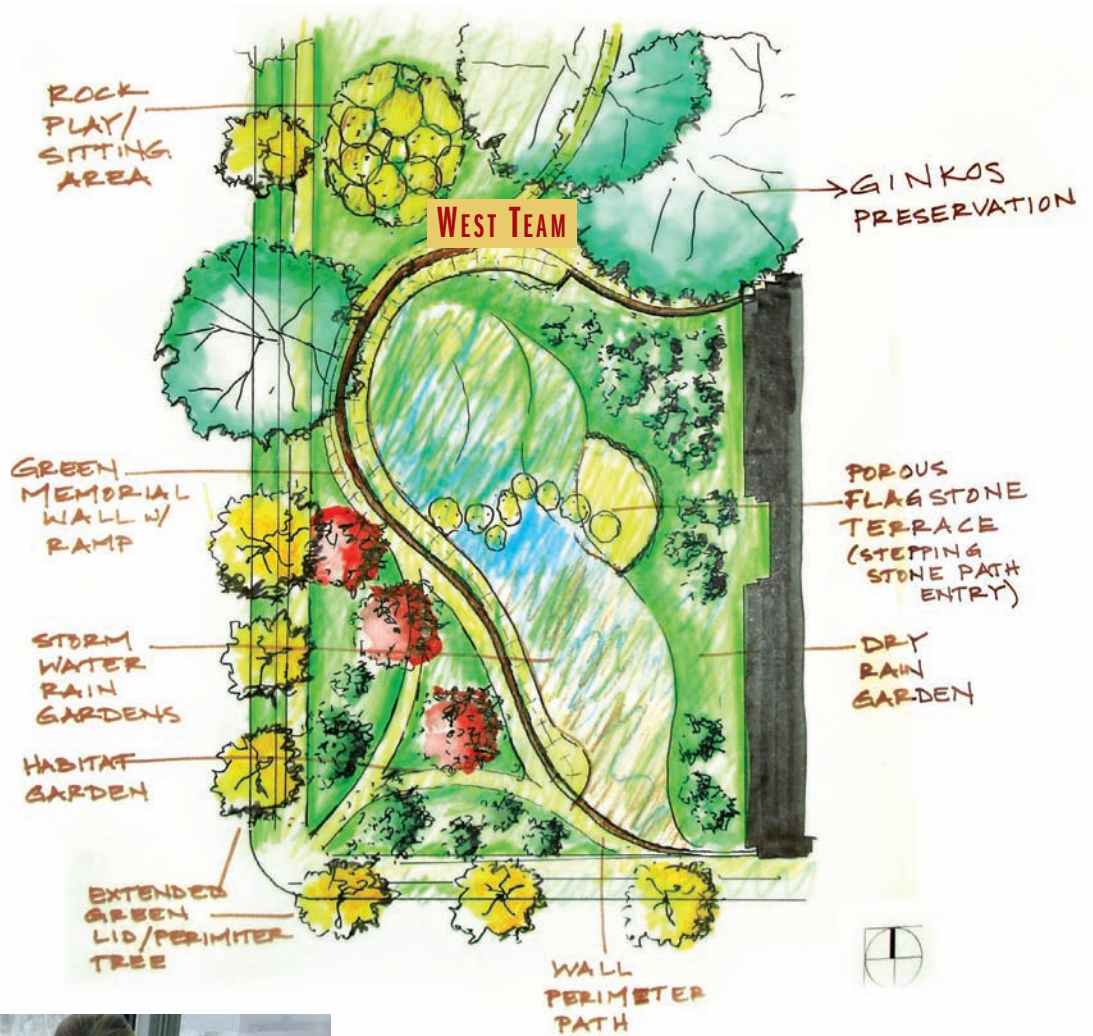
The main features of this site are parking and a one-story utility building. The building has a green roof, but it's not visible to passersby. As on other sites, steep slopes along the perimeter moat are planted with ivy. The ivy and street trees here are performing poorly. A row of security planters adds no interest.



The Southwest design would make the green roof more visible to passersby.

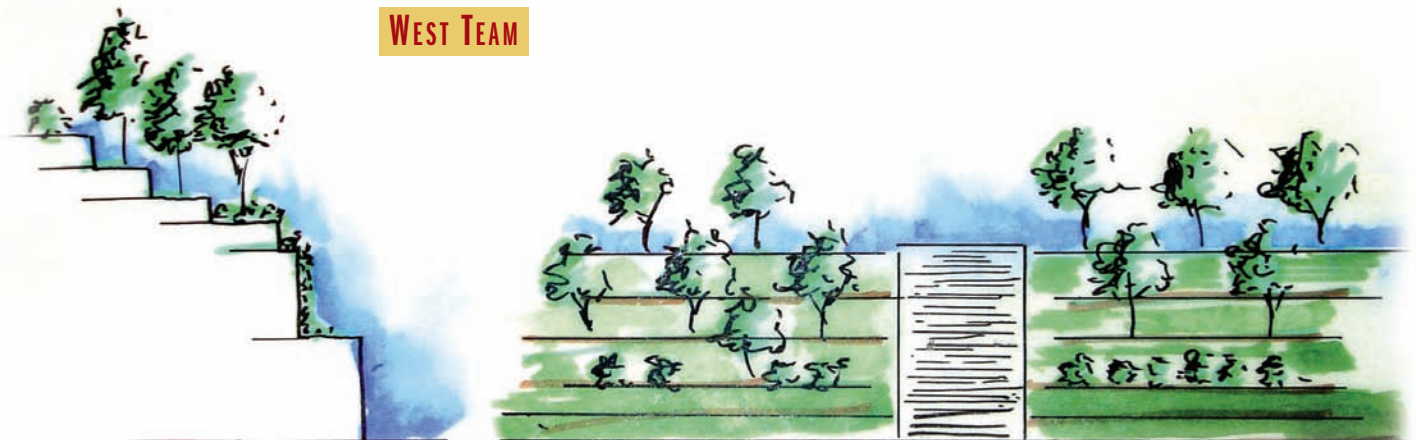
“As much as we’re counting on good ideas, the key to success over the long term will be the network.”

The West team, below, proposed making that space a lush “gateway” site, right, as well as mitigating and replanting the “moat” slopes, bottom.



WEST ZONE

This site features a lot of parking, but there’s more planted screening than in most other parking-heavy zones. Fourteenth Street, the western boundary of the site, is a busy road on which many drivers enter and exit the city. The Washington Monument and other Mall attractions are visible. The stately trees in the Northwest Zone add shade and beauty.



DESIGN

The group felt that the site has too much potential and visibility to be used for parking. Instead they proposed a concept making it into a lush “gateway” site, featuring a green memorial wall, rain and habitat gardens, and a rocky area for play or just sitting.

ARNN AND SNIECKUS wasted no time in drawing up a written report of the charrette, replete with images and details of the seven concepts, to keep the momentum going within the agency. “We got good feedback from colleagues after the event,” Arnn told us shortly afterward. “They want to see results, so we’re working quickly and trying to be responsive.”

HOW MUCH IMPACT is a one-day charrette likely to have on even a small part of a huge federal agency?

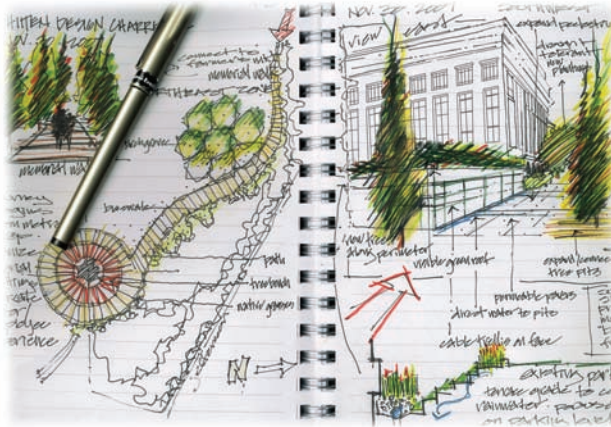
“Having worked in government for most of my career, I know it can move at glacial speeds,” says Snieckus. “But I have a very good feeling about this, and the buzz created by the charrette.” That buzz continued long after the event; Assistant Secretary Boyd Rutherford told us in January that many ideas were under consideration, including new approaches to parking. “Everyone is excited about the project,” he says. As this article was being written, the landscape architects were putting the finishing touches on the report, preparing to refine the concepts and narrow the choices, and hoping to break ground on the first project around Earth Day.

But they hope the project will go on much longer. The Office of Operations is looking into hiring a landscape architect to oversee the long-term project, and Arnn and Snieckus want all of the participants to stay involved. “As much as we’re counting on good ideas, the key to success over the long term will be the network and (participants’) sense of ownership over the process,” says Arnn.

And a lot of the participants were glad to be asked. Landscape architect Elliott Rhodeside, who has worked on big projects for federal agencies and served as a facilitator for the charrette, liked the conviviality. “It was more cerebral and creative than a contractual process requiring approval,” he says. “We had a lot of freedom that isn’t typically part of the process.”

“The most exciting thing was that the USDA was reaching out, saying, ‘This is your government, this is your space, this is your Mall—what do *you* want to be there?’” says Rick Harlan Schneider of Envision Design, who also served as a facilitator.

“It’s hard to look back and enjoy the day for what it was—an expression of energy,” says Arnn. “The reality is that it’s part of a larger, longer-term process and vision for an improved headquarters landscape. Until that happens, we’re not taking anything for granted.” [LAW](#)



Landscape architect Matt Arnn immediately started working up detailed sketches based on participants’ ideas.

Resources

■ Follow the progress of the USDA Sustainable Landscape Partnership and the concept plan for the Whitten Building at www.greening.usda.gov.

