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Iandscape should communicate the unique philosophy and sense of mission embodied in the institution it surrounds—even to those who never venture past the front gates.

Achieving an exterior environment that makes a strong, positive first impression on visitors and passersby is not a random process. When an institution works with a landscape architect or design firm to extend its message in a deliberate way, within and throughout the campus, the result can be lasting and powerful. Where a landscape environment is out of alignment with an institution's mission and purpose, or if any landscape is not properly maintained, that can tell a story of neglect or indifference, or potentially convey a lack of competence.

### **MISSION STATEMENTS—FROM THE STREET TO THE DOOR**

For a person outside, a thoughtfully designed and carefully maintained landscape elegantly uses plants and materials to generate a spatial, intangible, human-scale link to buildings and the people in them. Landscaping elements can be used strategically to soften or even camouflage nondescript or severe building characteristics. A new community college might choose to welcome enrollees with wide, stately lawns that harken back to traditional university quadrangles—or it may adopt native plants and low-impact prairies to demonstrate an institutional commitment to sustainability.

The storytelling power of landscape design is just as important when an institution is housed in an architectural landmark. Consider the **Metropolitan Museum of Art** in New York City, which recently invested \$65 million in a new four-block plaza outside its Beaux-Arts façade on Fifth Avenue. The design brackets the museum's iconic grand staircase with a massive pair of contemporary fountains. The sidewalk is now shaded by two aisles of linden trees that when mature will be pruned into cube-shaped aerial hedges, similar to those at the Palais Royal gardens in Paris—a nod to the museum's magnificent collection of European art. Casual seating, shaded by trees and sun canopies, invite passersby to stop and enjoy the urban vista. At the project's groundbreaking in 2013, Daniel Brodsky, chairman of the museum's board of trustees, said the design was intended to extend the museum's reach to the 6 million pedestrians who walk past the building each year. "It will give the Met a portal outside that is truly worthy of the masterpieces that grace our galleries inside," Brodsky said.

Institutions in urban areas may need to take a more interiorcentric approach to landscape design. Institutions are often nestled into bustling downtown streetscapes and commercial districts. When the **Poetry Foundation** chose an urban site surrounded by residential towers for its new headquarters in Chicago, the architect was asked to include a garden space that could be used to host events. The site was developed with an open frontage off the main sidewalk by way of liberating available interior square footage. The 4,000-square-foot courtyard is open to the public and offers a sanctuary from the urban bustle outside its walls. With its Zen approach, the building's minimalist garden serves as a serene place to promote individual reflection as easily as it invites formal gathering for recital. "It's not something that screams at you," architect John Ronan told *Chicago* magazine when the building opened in 2011. "We wanted to arrange the materials and spaces analogously to how a poet arranges words—to help you see something you didn't see before."

### PREREQUISITES TO SUCCESS

Landscapes are living things that grow, change, and develop over time. Essential to a successful landscape design is a comprehensive, well-thoughtout plan for installation and maintenance that reflects the institution's mission and goals, and harmonizes with the surrounding environs. The plan must conform to local regulations and should seek to benefit the overall environment. Invariably, plans of the size and scope of these highlighted projects comprise complex documents requiring

Existing gardens and grounds provide inspiration for future landscapes at Princeton University.



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certified professional expertise. They also require cooperation with municipalities and a time commitment for thorough input from all stakeholders inside and outside the institution.

For example, it took a team of experts, stakeholders, and community members more than two years to produce **Princeton University**'s campus plan, unveiled in 2008. Their campus plan, which reflected the university's strategic decision to limit new construction to the existing campus areas, included detailed

landscape design projects as part of its overall goals of promoting environmental responsibility and a strong sense of community. The university's challenge included blending the several distinct styles that had been individually adopted over the century as the campus expanded. They were looking to develop a cohesive expression that benefited both old and new infrastructures and legacies.

To address one overall functional objective to better manage stormwater run-off, designers proposed to integrate a sustainable landscape region of bioswales and rain gardens around Princeton's new stateof-the-art chemistry building. The two entities serve together symbolically as well as through their practical applications.

In addition to large-scale infrastructure projects, Princeton has also continued its tradition of smaller, distinctive garden spaces within the overall landscape, with some recent additions of several "highlighting" gardens that greet the student body and interface purposefully within the surrounding departments. Through its overall initiative and investment in additional smaller garden spaces, Princeton further embraced the history of its 250-year-old campus and emphasized the university's commitment to landscape environments as an essential component of its educational mission going forward.

### CONNECTION TO THE COMMUNITY

The importance of connecting buildings to their surrounding landscapes and the perils of not carrying through are demonstrated by Philadelphia's **Benjamin Franklin Parkway**, designed a century ago as a mile-long scenic parkway connecting City Hall to the Philadelphia Museum of Art. The original plan's vision to create a lush boulevard were never fully realized; over the years, the formal character of the Parkway faded as its long rows of red oak trees withered and died. Civic neglect and increasing car traffic combined to turn the Parkway into a series of "big, vacant parcels framed by high-speed traffic," according to Harris M. Steinberg, executive director of PennPraxis, the University of Pennsylvania School of Design's research arm.

A public-private consortium recently invested nearly \$20 mil-

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lion in new lighting, street improvements, and enhanced green spaces for the Parkway. Now the refreshed landscape reflects the ongoing revitalization and expansion of Parkway institutions: The Philadelphia Museum of Art and The Barnes Foundation, which brought one of the world's greatest collections of 19th and 20th century French art to their Philadelphia campus in 2012. The old oak trees have been replaced with hardier new varieties, and the current design utilizes a diversification of tree species for improved sustainability—directing that a majority of the trees be oaks—to maintain the site's original legacy. To ensure the design intent enjoys faithful stewardship, a group of city organizations jointly developed a long-term maintenance plan. This provides a critical commitment toward sustaining a high standard of landscaping for a vibrant and green Parkway in years to come.

### WORTH THE TIME, WORTH THE THOUGHT

The challenge of telling an institution's story through a landscape design is far from simple. A design that is attractive and aligned with the institution's mission should be the primary goal. The first step in achieving that end is defining design constraints. Among them: All landscape designs will need to meet requirements defined by local ordinances. Increasingly, requirements include strict standards for sustainability and environmental impact. This trend may necessitate a creative, perhaps less conventional, solution.

Also essential is the architecture of the building or buildings. Colleges, universities, and schools facing new building projects of any scope are advised to consider the building architecture and landscape design requirements collaboratively to achieve optimal results.

The Washington State Higher Education Coordination Board faced these challenges with remarkable success when planning a new **University of Washington** branch campus and a new community college in **Bothell**, about 15 miles north of Seattle. Because available sites were severely limited, the board decided to co-locate the two institutions on a single 127-acre property that would ultimately serve 10,000 students.

The decision to combine the two and share facilities made it possible to limit the campus building footprint to about one-half of the site. Environmental regulations required the board to mitigate the building impacts by creating new wetlands areas of equal size elsewhere on the site.

Because one of their guiding principles for the landscape de-

sign was to maximize both natural form and campus function, the pair decided to exceed those regulations and transform the site's remaining 58 acres into one of the Pacific Northwest's largest wetlands restoration projects. As part of the project, a 3,200-foot stretch of the salmonbearing North Creek's channel was re-routed through its original floodplain, and more than 400,000 trees, shrubs, and herbaceous plants were hand-planted throughout the adjoining wetlands. Since the project's completion in 2002, the campus wetlands have become an important educational resource for both college students and K-12 students throughout the area. Many classes at both institutions use the wetlands as a living laboratory, and the site has come to be used for professional training in wetland mitigation best practices.

### **RETURN ON INVESTMENT**

Although the Bothell campus has been a great success, environmentally and educationally, the wetlands restoration also underscores the need for institutions to consider long-term maintenance costs when planning major landscaping projects. Over the first

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decade, wetlands maintenance required about 5,300 hours of labor each year, at an annual cost of more than \$145,000. Summer droughts killed young plants, requiring replacement and replanting, and constant vigilance (and weeding) was required to keep non-native plants from regaining their foothold.

Sustainable landscape designs are being looked upon to meet new regulations and potentially yield substantial operational savings. **Cal State Fullerton** recently claimed having spent \$250,000 in the last decade to retrofit irrigation systems and replace grassy lawns with new drought-tolerant landscapes to meet a state mandate for a 20 percent reduction in water use by 2020. Their motive for this approach is that the alternative groundcover has been locally surveyed to reduce water consumption 23 percent. Although that replacement cost is substantial, irrigation accounted for about 60 percent of the facility's total annual water bill of \$360,000 in 2013. Over the long run there is an outlook to realize a net benefit in both water conservation and cost reduction by watering less lawn something to evaluate over time.

### CONCLUSION

Whether an institution is centuries old or newly founded, the fundamental questions that shape a landscape plan remain the same: What is our budget, for the new design and for future maintenance? What practical and regulatory constraints do we need to consider? What sustainability goals are we trying to achieve? Who will see this space? How will it be used? How will it be maintained? And most importantly—What story do we want to tell?

These aren't questions answered easily. But an institution that invests the necessary time and thought into finding the right answers for them can create a new landscape that is beautiful, functional, and affordable, and provides a better work environment for staff, attracts new visitors, strengthens bonds to the surrounding community, protects the environment, and tells the story of its mission and its identity, both now and in the future. ()

Carleton Beach is landscape management specialist at SMS Assist, LLC, in Chicago, IL. He can be reached at *cbeach@sms-assist.com*. This is his first article for *Facilities Manager*.

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