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THE EMERGENCE OF PARKS LIKE BROOKLYN BRIDGE is a manifestation of a national conversation about parks and open space



## *river* RENAISSANCE

BROOKLYN'S INDUSTRIAL WATERFRONT REBORN AS STATE-OF-THE-ART PARK by joe flanagan

Along the waterfront, below the steady roar of the Brooklyn-

Queens Expressway, there is a stillness about the former piers and warehouses. Swales of green, little billocks bounded by marsh grass and saplings, appear at intervals amid the remnants of commerce and industry. The vast once-working dockyard on the East River is transforming into what may be one of the premier urban parks in the United States. The 1.3-mile stretch was once a heart of commercial activity, its development going back to the 17th century, when landfill was used to bolster the shoreline. The waterfront continued to thrive throughout the 19th century and most of the 20th. In the 1950s, the port authority expanded it into an 85-acre shipping facility, building six massive concrete piers and a complex of warehouses. The BQE was built at about the same time, finalizing Brooklyn's separation from the river. But by the 1970s, when containerized shipping revolutionized the industry, the urban waterfront—like many across the nation—had become obsolete.

Left: Brooklyn Bridge Park with remnants of the old waterfront in the lower foreground while a crowd enjoys a film in the open air surrounded by green. For decades the land and its infrastructure sat dormant, a gritty counterpoint to the sleek sophistication of Manhattan across the water. Now, it is an acclaimed work-in-progress by Michael Van Valkenburgh Associates, an award-winning landscape architecture firm with a number of notable projects to its credit: a re-envisioning of Harvard Yard; New York City's Teardrop Park; and the re-design of the grounds at Jefferson National Expansion Memorial in St. Louis, another promising project in the works. Brooklyn Bridge Park, as the site is now known, reconnects residents

to the East River in a way that hasn't been possible for years. "For the



first time in a couple of generations . . . cities are becoming more attractive to younger generations raising kids," says Matthew Urbanski, lead designer and a principal at the firm. "Cities are becoming friendlier to families and children. Providing a connection to nature, that is the ultimate sustainability gesture we're trying to make."



about eight acres—is planned for either end of the parcel. The park is expected to be completed in 2015, with an estimated cost of \$350 million. It is intended to be economically self-sufficient, maintained not by city revenue, but by taxes generated by the buildings and businesses on site. This reflects a national trend where public parks are only approved where they can support themselves and don't have to compete with schools and city services for funds.

Van Valkenburgh Associates describe the parks they design as "founded on the idea of the commons-democratic, inclusive open

> spaces that anchor neighborhoods and serve as focal points in the daily rhythms of the lives of their users, while promoting ecological, programmatic, experiential, and social diversity." The emergence of parks like Brooklyn Bridge is a manifestation of a national conversation over the past several years about parks and open space. Development, climate change, demographic shifts, and what author Richard Louv describes as a "nature deficit disorder" hint at a future in which parks and preserves may no longer be sustainable. Americans are more technologically attuned—and more distanced from the natural world—than ever before. Many immigrants come from places with no history of parks and no cultural attachment to the American landscape or its narrative. We live increasingly sedentary lives, which plays a part in the rise in obesity, heart disease, and other illnesses.

Dealing with these trends is a big issue among preservationists, land managers, and anyone else with a stake in parks, be they local, state, or national. The National Park Service has made relevance to the public one of its top priorities. There is a push to promote parks as critical to the nation's health system, as evidenced in President Obama's America's Great Outdoors initiative, the international Healthy Parks Healthy People movement, and the First Lady's Let's Move Outside program. All intend to reconnect Americans to the outdoors, not only for its healthy physical and social effects, but to provide teachable moments in which the impor-

## THEY REPUSHING BABY STROLLERS, riding their bikes,

sustainability gesture we're trying to make." Aside from landscaping and restored habitats, the park features playgrounds, performance space, and access points to the water. Free public programming—entertainment as well as education—is part of the experience. The Brooklyn Bridge Park Conservancy, an independent citizens' group instrumental in the creation of the space, uses it as a living classroom. "The Great Brooklyn Bridge," "The Birds of Brooklyn Bridge Park," and "Rove the Cove" are a few of the offerings intended to educate school children about the environment and the city's history. The conservancy also sponsors outdoor exercise classes, stargazing, history tours, and much more. This summer saw a recital by the Metropolitan Opera and thousands turned out for open-air film screenings, drive-in style, with the lit buildings of Manhattan as a backdrop.

For years, the abandoned site was a point of contention between citizens and developers. Dense, high-rise construction had been considered for a long time. The park was approved in 2006, after two decades of argument, study, and planning. Limited residential developmenttance and fragility of the natural world can be communicated. The urgency has occasioned a movement whose aim is to assert the importance of open space, re-examining the way we think about, use, and create parks. The National Park Service has been a leader in this endeavor, forming a partnership with the University of Virginia, the National Parks Conservation Association, the Institute at the Golden Gate, the Van Alen Institute, and others. The result, an initiative called "Designing the Parks," is an effort to produce "healthy, vibrant public parks as a core of civic life." The partnership has established principles critical to creating sustainable parks. Perhaps the most important is consulting with those who will use them and engaging them in the planning.

**Above and right:** The presence of both the Brooklyn and Manhattan Bridges ensure that the park is defined by New York iconography while nature—in an artfully disguised randomness—softens urban edges. In the context of the park and its natural elements, the bridges play like sculpture.



jogging, and walking dogs. A German couple is looking for just the right vantage point for a picture of Manhattan.



**MUCH OF THE INDUSTRIAL INFRASTRUCTURE** has been allowed to remain.



The former piers are actually massive concrete platforms, each about the size of a football field, that extend into the river.



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DAVID ANDREWS/NPS



**TO THIS END, DESIGNING THE PARKS HAS SPONSORED LECTURES AND DESIGN CHARETTES** to explore approaches to creating public space. At a recent event at the University of Virginia School of Landscape Architecture, National Park Service Director Jon Jarvis and Michael Van Valkenburgh talked about the future of the national park experience. The event posed a question relevant not just to national parks, but to public spaces everywhere: "As the social and environmental contexts of the national parks continue to and walking dogs. A German couple is wandering around with expensive-looking camera equipment looking for just the right vantage point for a picture of Manhattan. People have taken to the entire work in progress, from the lush landscapes at each end to the concrete-andmacadam remnants in between. Much of the industrial infrastructure, in fact, will remain. Even in this incomplete state, the vision is compelling, which is why the project has already earned high marks.

change, is the basic aspiration of the National Park System—to conserve natural and historical places while making them accessible for public benefit—still feasible or even desirable?" The theme of the talk, embodied in much of Van Valkenburgh's work, was how 21st-century parks can not only address new conditions, but thrive in them.

Both Brooklyn Bridge Park and Teardrop Park have received awards from the partnership. Van Valkenburgh's conception of a revitalized Jefferson National Expansion Memorial looks to re-connect downtown St. Louis with the Mississippi River—and with a park long isolated by urban infrastructure.

Van Valkenburgh's ideas about landscape—influenced by Frederick Law Olmsted and earth artist Robert

Smithson—have found a conceptual common ground with the burgeoning open space renaissance. Describing his firm's work, he writes, "[We] operate with our own kind of preservationist agenda and creating a new social and environmental purpose through its transformation into public space." His approach to the St. Louis project is representative: recognizing not only the historic context of the Arch, but its modern significance as well; honoring the park's reference to the past while recreating it as a place that will be used and loved by the city of today.

The grounds were designed in the 1960s by landscape architect Dan Kiley. Van Valkenburgh Associates' proposed re-design aims to honor his vision, but "revitalize it in order to reintroduce ecological diversity and function to the currently inert monoculture of lawn." Three new "gateway" areas have been established, opening the edges of the park to bordering neighborhoods currently in the process of revitalization. The redesign is intended, in fact, to drive such improvements. Many of the same ideas are at work in the Brooklyn project.

A large part of the challenge—in the minds of potential users—is overcoming the seeming incongruity of green space in intensely urban environments. Why go walking down by the East River, even on a sparkling warm autumn day? But people are doing exactly that, even with the park unfinished. They're pushing baby strollers, riding their bikes, jogging,



In discreet turnoffs, behind tall grasses and young saplings, silent little playgrounds offer kids an opportunity for wonder and adventure. Residents said they wanted to be able to get to the water; rocks serve as a breakwater for ramps down to the river, launch points for canoes and kayaks. Old pilings recall the river's story. The former piers, actually massive concrete platforms each about the size of a football field, extend far into the river. The margins of the waterfront are planted to seem like dozens of micro-parks: winding trails, copses of trees, marshy inlets that offer momentary isolation from the harsh and frantic feel of the city. Many of the species are native, lending a carefully executed randomness about it. You could almost think that this patch of tall grass, or this bunch of young trees, were completely acci-

dental. They look like what you might find growing wild along an eastern river, but for a barely discernible artifice. Though not necessarily an example of what Van Valkenburgh calls "Olmstedian irregularity," they do evidence the master's penchant for the random, naturalistic placing of things. The curved landforms and long hedgerows, Van Valkenburgh writes, "have been composed to complement the angular geometry of the waterfront rather than impose a normalizing aesthetic traditionalism." The composition serves to shield users from the wind and glare off the water, and the noise from the BQE.

**Previous pages:** An ode to the past. The skeletons of warehouses that formerly lined the waterfront will be allowed to remain as part of the design. While expressive of the river's economic bistory, some will serve as shade structures with foliage trailing up their framework—and others as recreation space. **Above:** The park was designed with children in mind. Open space is sorely needed in urban environments and Van Valkenburgh Associates created a number of bideaways where kids can experience the thrill of discovery, one of the park's most compelling qualities for children of all ages. **Right:** Wetlands regain a footbold on the East River in the shadow of Brooklyn Bridge. micro-parks: winding trails, copses of trees, marshy inlets, that offer momentary isolation from the harsh and frantic feel of the city.



ABOVE AND LEFT ELIZABETH FELICELLA



IN DISCREET TURNOFFS, behind tall grasses and young saplings,



ABOVE ELIZABETH FELICELLA, RIGHT TOP DAVID ANDREWS/NPS, RIGHT BOTTOM MICHAEL VAN VALKENBURGH ASSOCIATES, INC.



**THE CHALLENGE OF CREATING A PARK OUT OF A FORMER INDUSTRIAL WATERFRONT WAS, OF COURSE,** daunting. Full ecological restoration was not considered feasible. What the designers have done instead is create what Van Valkenburgh calls "new environments that attempt to emulate a higher level of ecological diversity within the constraints of found site conditions." He points out that ideas about ecology have changed since the concept first gained recognition in the 1970s. With this change has come a shift in how landscape architecture is understood. The ideal of returning to a truly natural state is largely illusory. Natural environments are dynamic. The only constant is change, a fact that can be used to full advantage in park design. Van Valkenburgh Associates does not attempt to restore sites to their historic—and often idealized—conditions. This approach misconstrues the meaning of ecology and works against creating a landscape that is truly vital in the present. Van Valkenburgh prefers to let a landscape "continue to grow and thrive in its own particular (and perhaps unpredictable) way." He refers to Robert Smithson's maxim that in order to restore, one must transform.

The past—in the form of the original idea behind old landscapes—can continue to live in the present even if its particulars do not. When Van Valkenburgh Associates were called in to work on Harvard Yard, its rows of historic elms (planted by the Olmsted

brothers firm as part of a turn-of-the-century restoration) were not only near the end of their lives but had been decimated by Dutch elm disease. Replacing them with another species was considered unwise (the monoculture of ash trees at the St. Louis Arch is being similarly destroyed by the emerald ash borer). Replacing Harvard's elms with a mixture of species, however, made sense. Van Valkenburgh chose trees that were suitable for the microclimates within the yard black tupelo and sweet gum for wet areas; hackberry in compacted, heavily trafficked places.

To counter the risk of what Van Valkenburgh described as a "salad bar" look, the trees were pruned so that the height of the canopy was consistent, in keeping with the spatial effect the Olmsted brothers had originally intended. The idea of a broad palette of species to replace the venerable elms was a radical one, but the guiding concept was that of Harvard as a cathedral of higher learning, an effect that was accomplished with large, high-canopied trees that create the stately atmosphere suitable to the place.

Left: Playing amidst the green at one of the many micro-parks. **Right:** The park is as much about culture as it is nature. Created to thrive in the city of today, it is designed to attract families as an extension of the surrounding neighborhoods. Public engagement—encouraged by these features—ensures that the space is vital.





AT BROOKLYN BRIDGE PARK, AN IMPORTANT PART OF THE INTENT WAS PRESERVING THE site's maritime past, which in the context of the park, is not what is normally understood as preservation. It is more reference and allusion: the old pilings in the water, now a habitat for fish; the concrete platforms in the river, expressive in their mass and ambition of a former economic vitality. Similar allusions are conjured up by the Brooklyn Bridge, which serves as the park's visual centerpiece, and further on, by the Manhattan Bridge as well. In addition to this, there are the buildings of Brooklyn Heights, and across the river perhaps the best view anywhere of the Manhattan skyline. The story that unfolds is not a single narrative, but many; that of a dynamic and ever-changing waterfront, its edges somewhat softened now by the rolling green and stands of slender trees. The metal frame of an industrial warehouse, allowed to remain on one of the concrete piers, speaks volumes about the city's mercantile past. "It was an interesting challenge," says Urbanski. "What do you keep and what do you change? Not just for prac-

tical reasons but for experiential reasons." The firm rejected the typical things you might see in a waterfront restoration, like "nice Victorian lamp posts," he says. "We didn't want to do that-it would take away its character as an industrial site, take away its generosity of scale." The rolling landforms that make up the park were sculpted out of 59,000 cubic yards of fill trucked from excavations for a tunnel to connect Grand Central and Penn Stations. The fill was deposited in layers, each reinforced by polyethylene mesh, allowing rainwater to percolate, which prevents slumping and erosion. The top layers are horticultural soils to foster plant growth. Fertilizers are all natural, a practice that will continue in the park's future maintenance. And, instead of feeding New York's sewersan already taxed system mixing storm water with household and industrial waste-the park recycles rainwater to meet almost all of its irrigation needs.

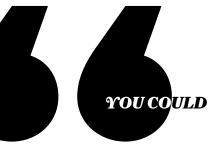
One of the biggest challenges was the presence of the BQE, which is cantilevered out from the escarpment of

Brooklyn Heights and its 19th-century buildings high above the park. The solution to alleviate the sometimes deafening traffic was not a conventional solid barrier but an acoustically engineered earthen berm. At 38 feet tall, it was digitally modeled in 3D to coax out its maximum ability to shield noise, which is expected to be about 75 percent. Of primary concern was how the park mingles with its edges. This is true of all urban landscapes, but particularly here where the waterfront evolved to exclude casual access, useful for commerce but otherwise forbidding to visitors. The margins of the park are designed to be porous, to invite passage from the neighborhoods to the water. "Buildings are about edges," Van Valkenburgh says. "Landscapes are about continuities." The latter fails when it imitates the former. Furman Street, which runs parallel to the river, is no longer one way, which Urbanski says "humanizes" it. A tall chain link fence has been removed and parking will be available along its length, which will abut green space. Major arteries like Atlantic Avenue lead directly to the park.

The firm intends to "push the boundaries" of public landscapes, Urbanski says. Passive use—the Olmstedian concept of sitting there admiring the scenery—is largely a thing of the past, he adds, as is the trend of using the outdoors for straightforward recreation. "Parkgoers want more engagement," he says. "They want edgier things like rock climbing. They want kayaking. There's a level of involvement

with nature they're after. It isn't just about beauty. It's about scientific understanding of what they're seeing."





**IF PARKS AS IDEA AND EXPERIENCE ARE TO REMAIN** relevant, designers and stewards need to embrace such flexibility and innovation. This means opening up understanding of public space as not simply commemoration or reproducing a moment in time. Robert Smithson captures the idea in his essay, "Frederick Law Olmsted and the Dialectical Landscape": "A park can no longer be seen as 'a thing in itself,' but rather as a process of ongoing relationships existing in a physical region—the park becomes 'a thing for us."

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**Above and right:** While restoring the shoreline to a long-ago state was not feasible, the designers reintroduced the natural world in a way previously seemed unthinkable. Fish, birds, and plant life have all returned, the park becoming a classroom for environmental awareness. **Following pages:** Viewing a film drive-in style in the shadow of the Brooklyn Bridge, depicted in a concept rendering of the park.



**ALMOST THINK** that this patch of tall grass, or this bunch of young trees, were completely accidental.







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RENDERING BY MICHAEL VAN VALKENBURGH ASSOCIATES, INC.