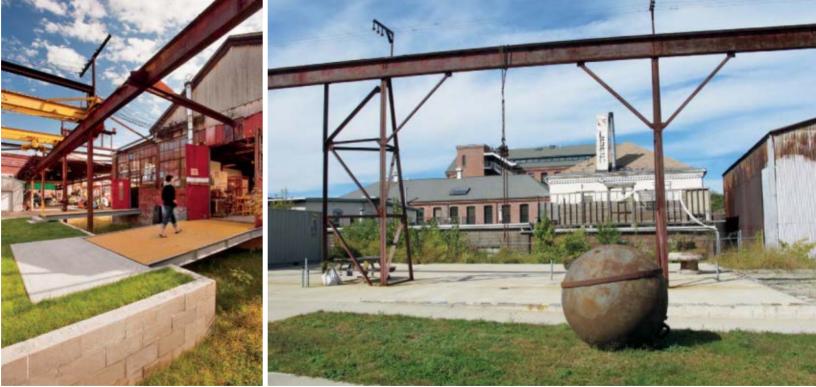
Silver Medal Winner The Steel Yard Providence, Rhode Island



This is an expert from:

Inspiring Change The 2013 Rudy Bruner Award for Urban Excellence



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# Overview

Submitted by: Klopfer Martin Design Group Completed: 2010 Total Development Cost: \$1.2 million

Located in Providence's "Industrial Valley" along the Woonasquatucket River just west of downtown, The Steel Yard occupies the former site of the Providence Iron and Steel Company, a 100-year old business that closed in 2001. The property was purchased by two recent graduates of Rhode Island School of Design (RISD) and Brown University who had participated in the redevelopment of the adjoining Monohasset Mill property into artist housing. The 3.5-acre site, with its gantry cranes and rough brick and metal buildings, became an ad hoc community and gathering space for people interested in creative, industrial arts. The Steel Yard was incorporated into a nonprofit organization and subsequently hired an executive director to oversee expansion of the organization and the redevelopment of the site. Landscape architecture firm Klopfer Martin Design Group was engaged to develop a master plan that retained the wild, industrial character of the site while addressing the cleanup of the significant contamination generated by the former business. Remediation required compliance with the US Environmental Protection Agency (EPA), the Rhode Island Department of Environmental Management's (DEM) regulations, and months of negotiation with numerous environmental agencies including the Narragansett Bay Commission.

## "AN EXEMPLARY MODEL OF REUSE AND TRANSFORMATION THAT IS BUILT ON THE COMMUNITY'S LOCAL HISTORY AND TALENT, AND PRESERVES INDUSTRIAL HISTORY AND CULTURE IN AN AUTHENTIC WAY." –2013 Selection Committee

The resulting design, completed in 2010, is a creative response to strict regulatory requirements and the Steel Yard's commitment to utilize the best sustainable practices possible, even within a tight budget. A minimal amount of the most contaminated soil was removed. The remainder was treated with a binder, consolidated, capped and covered with clean soil, creating nine different landforms in the process. Permeable paving reduces runoff, and the site is graded to create a moat that collects storm water, 90 percent of which remains on site. The project's landforms and variety of paving materials create visual interest and allow for a variety of activities including tractor-trailer deliveries, product fabrication, and display and gathering spaces for events. Scrap metal is incorporated into retaining walls and railings. Native, easily colonized plants were selected to recreate the untended, "urban wild" look of the site prior to remediation. Hook-ups for future power and plumbing have been provided throughout the property to allow for future expansion of programming and facilities.

The Steel Yard seeks to foster the industrial arts and incubate small business within a creative environment of experimentation. Today, the campus offers industrial arts classes for adults and area youth, a workforce training program, and fabrication space used by the organization and area artists. Through its Public Projects program, the Steel Yard works with local artists to design and produce custom-made street furniture—bike racks, fencing and gates, trashcans, and tree guards—placed downtown and in city neighborhoods, recognized by the Steel Yard logo. The Steel Yard is host to numerous public events, including an annual Halloween Iron Pour, classic car shows, movie nights, and private weddings and events.

Funding for the \$1.2 million development included two EPA brownfield redevelopment grants. Ongoing operating and program support for the organization is provided by Public Projects commissions, earned income from classes, site rentals, private donors, foundations, partnerships with local businesses, and the Rhode Island State Council on the Arts.

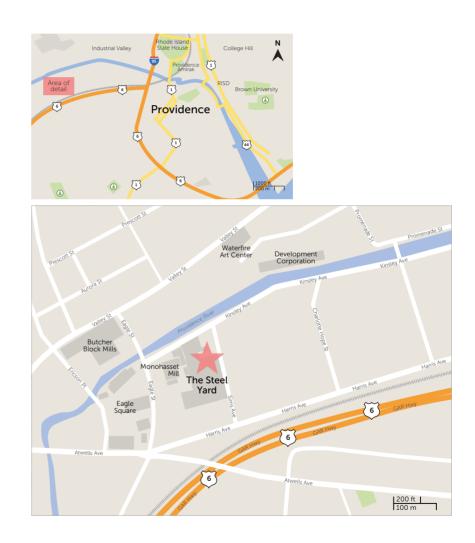
The Steel Yard has become a center for creative activity, bridging Providence's traditional arts community with manufacturing businesses and the city's industrial, lower-income West Side. The project has received recognition for its innovative approach to site remediation, including a 2011 Honor Award from the American Society of Landscape Architects (ASLA) and documentation as a case study for brownfield regeneration by the EPA and others. Investment in and redevelopment of the property and surrounding mill buildings reflect the city's growing interest and pride in its industrial heritage and creative community.





# Project at-a-Glance

- The redevelopment of a historic steel fabrication facility into a campus for arts education, workforce training and small-scale manufacturing in Providence's Industrial Valley.
- Extensive environmental remediation of the 3.5-acre property that addressed The Steel Yard' desire to utilize the best sustainable practices possible and retain the industrial and "urban wild" character of the site while meeting strict local, state and federal regulatory requirements.
- An industrial arts and small business incubator that offers classes, workforce training and fabrication space used by the organization and area artists, including The Steel Yard's Public Projects program that designs and fabricates custom-made street furniture.
- A center for creative activity and events that bridge the traditional arts community on Providence's East Side with manufacturing businesses and the industrial, lower-income West Side, and reflects the city's growing interest and pride in its industrial heritage and its "Creative Capital" identity.







# Project Goals

- Create a memorable and flexible space that embodies the organization's mission.
- Engage the site's unique existing structures.
- Utilize best sustainable practices within a constrained budget.
- Provide a public landscape to an underserved neighborhood of Providence.
- Serve as an example to others of the potential for local properties to be revitalized in nontraditional ways.



# OREMO

# Chronology





Board of Trade Journal 1902





Noprer Martin Design Grou

**1822** Builders Iron Foundry (BIF), precursor to the Providence Steel and Iron Company (PSI), is founded.

1850-60s Industry grows in Valley with introduction of rail service and channeling of Woonasquatucket River.

**1902** BIF begins construction of structural steel shop complex at 27 Sims Avenue.

1920-60s Industrial manufacturing declines, followed by businesses and population loss, and deterioration of neighborhoods and downtown. 2000 Controversy erupts over proposal to replace Eagle Square mill building complex occupied by artist "squatters" with shopping center.

Clay Rockefeller partners with three Valley residents to develop Monohasset Mill artist live/work space.

2001 Nick Bauta and Clay Rockefeller initiate purchase of former Providence Steel and Iron (PSI) complex as Milhaus LLC.

Phase I and II Environmental Assessments.

2002 Woonasquatucket Valley Community Build (WVCB) is incorporated as 501(c)3 nonprofit organization under the leadership of founding Executive Director Peter Eiermann.

Property sale is completed.

Welding space is offered.

Rhode Island Department of Environmental Management (RIDEM) and Milhaus LLC negotiate Settlement Agreement.

2003 Jacques Witford Company develops Remedial Action Work Plan which is approved by RIDEM.

Initial groundwater investigation is conducted.

Landscape cap design begins.

Studio rentals begin.

2004 Open enrollment classes and Public Projects program begin.

2005 Drake Patten is hired as executive director and begins work in 2006.

Percolation tests are completed.

Site placed on National Register of Historic Places.

Camp Metalhead launched.



2006 First phase of cap design is put out to bid.

EPA awards brownfield redevelopment funds.

"Yard by the Foot" campaign is launched.

WVCB registers "The Steel Yard" doing business as (DBA) name with IRS.

First Halloween Iron Pour is held.

2007 The Steel Yard purchases property from Milhaus LLC with RIDEM approval (May). Klopfer Martin Design Group begins design of Master Plan (July).

2008 RIDEM provides partial match to EPA grant.

2009 City of Providence rebrands itself as Creative Capital.

Second phase of cap design is put out to bid.

The Steel Yard negotiates loan with Rhode Island Economic Development Corporation.

Site remediation construction begins.

Workforce Training Program (now called Weld to Work) starts.

2010 Site remediation is completed.

Ribbon cutting ceremony is held.

Site rentals available.

**2011** Project featured in January "Game Changers 2011" issue of Metropolis Magazine.

Project receives awards from the Association of Landscape Architects, Boston Society of Landscape Architects, and Providence Preservation Society.

Project highlighted with case study in EPA's August issue of Brownfields Success in New England. **2012** The Steel Yard honored as Senator John H. Chafee Conservation Leadership Project by the Environmental Council of Rhode Island.

2013 Drake Patten steps down as executive director (February).

Helen Lang hired as new executive director (March).

10th anniversary events commence at the site (October).

Helen Lang resigns; Public Projects director Howie Sneider named Executive Director.

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# Project Description

The Steel Yard is the redevelopment of a historic steel fabrication facility into a campus offering arts education, workforce training and small-scale manufacturing in Providence's Industrial Valley. The design of the 3.5 acre property reflects a creative response to extensive environmental remediation that utilized the best sustainable practices possible while retaining the industrial and "urban wild" character of the site. The Steel Yard has become a valued community space and center for creative activity that reflects the city's growing interest and pride in its industrial heritage and its "Creative Capital" identity.



### CONTEXT

### Providence

Situated on the Providence River at the head of Narragansett Bay, Providence, Rhode Island was founded in 1636 by Roger Williams as a place for religious freedom and separation of church and state. The National Park Service's Roger Williams National Memorial in downtown Providence, the smallest park in the national system, recognizes his contributions to the principles of religious freedom in the United States.

By the time of the American Revolution, Providence was an established Colonial port with an economy supported by maritime trade, artisans and merchants, and small industries. Over the next century, it grew into a significant port and industrial and financial center, and became chartered as a city in 1832.

Railroads, the Blackstone Canal and proximity to Narragansett Bay contributed to the city's growth as an industrial center in the nineteenth century. The city's diverse manufacturing base included factories that produced jewelry, screws, silverware, steam engines, textiles and tools. Manufacturing declined in the twentieth century, beginning with the textile industry in the 1920's and continuing in succeeding decades as businesses and people moved out to suburbs and city population declined. In the 1970's and 1980's investment focused on downtown as residential neighborhoods and the city's "Industrial Valley" and West End languished.

Downtown investment included the Providence River Relocation Project (which received the 2003 Rudy Bruner Award for Urban Excellence Silver Medal), a major infrastructure program designed to



improve traffic flows in and through downtown. The project entailed rail relocation and construction of a new train station, realignment of downtown streets and highway connections, uncovering and relocating two rivers, creation of a new urban park and special development district, and public programming including the popular "Waterfire" events.

Today the city has a population of 178,042<sup>1</sup> (compared to about 250,000 at its peak) and is the third largest city in New England (2010 Census). Education, healthcare and tourism are the major economic drivers and institutions like Rhode Island School of Design (RISD) and Brown University are dominant in the community as is the revitalized downtown.

The city of Providence recently rebranded itself as "the Creative Capital" to promote its educational resources and growing arts community. In 2009 Mayor David Cicilline and the Department of Art, Culture + Tourism launched *Creative Providence: A Cultural Plan for the Creative*  Sector to examine the economic potential of the city's creative community. For the purpose of the initiative, the creative community included the arts, humanities and cultural heritage; media tourism and entertainment industries; and creative business-to-business services and designed-based businesses. The Steel Yard founders and staff participated in the project.

At the time of our site visit in April 2013, Providence and its mayor, Angel Taveras, were drawing national interest. The Urban Land Institute (ULI) Daniel Rose Center for Public Leadership named the Mayor to its 2011-2012 Daniel Rose Fellowship class. During the fall of 2012 the mayor and his team worked with Rose Center experts to focus on job creation and urban revitalization in Olneyville Square. In March 2013



Providence received Bloomberg Philanthropies Mayors Challenge Grand Prize for Innovation and a \$5 million implementation award for its early education initiative.

While the city has gained attention for its successful downtown revitalization, creative community and institutions, there are challenges. Like many older American cities, Providence is struggling to maintain a healthy fiscal status. There was a sense among several people we interviewed that prior mayors focused on downtown at the cost of neighborhoods, like those on the West Side, and left the city saddled with unsustainable debt.

### The Industrial Valley and Olneyville Community

The Steel Yard is located in Providence's Valley neighborhood on the city's West Side. The area includes a mix of residential, commercial, industrial and institutional uses. Industrial development began to occur along the Moshassuck and Woonasquatucket River valleys beginning in the mid-nineteenth century and continued into the early twentieth, generating a series of large brick mill complexes that lend the area its "Industrial Valley" name. The businesses declined after World War II and the buildings began to fall vacant until being reclaimed by artists, housing developers and small businesses.

The district is adjacent to Olneyville, among the oldest and poorest of Providence's neighborhoods, and has suffered 40 to 50 years disinvestment. According to the Providence Plan, in 2000 the majority (57%) of its 6,495 residents were Hispanic (compared to 30% in the city as a whole). The median family income was \$17,538 (compared to \$32,058 in Providence). In 2004 the median residential home price was \$190,500, 13 percent lower than the citywide median.

Manufacturing buildings along the Woonasquatucket River







Clockwise from top: Butcher Block Mill, Eagle Square, Sims Avenue

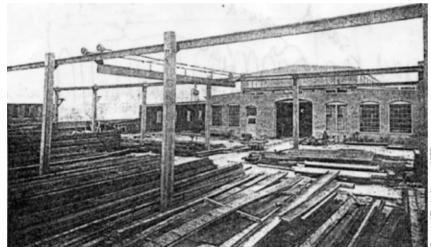
In 2000 controversy erupted over a proposal for redevelopment of mill buildings in the Valley near the current Steel Yard site. Known as Fort Thunder, the collection of historic mill buildings was home to a community of informal artist "squatters," who had become known and popular in the neighborhood. The original proposal for the development called for the demolition of the entire complex and construction of a new, suburban style strip shopping center. Protest from the community – over 300 artists reportedly stormed city hall – didn't succeed in stopping the development, but was able to cause changes to be made to the design which included saving four of the sixteen original buildings, revising the design of the new buildings to be more contextual with the mill structures, and creating a mixed-use development of retail and housing. The current development, known as Eagle Square, includes neighborhood retail serving businesses like a supermarket, dry cleaner and coffee shop.

The experience also sparked a preservation movement that focused on the area's historic mill buildings and precipitated a comprehensive inventory of historic structures by the City of Providence. The Steel Yard is now part of the city's Industrial & Commercial Buildings Historic District. This noncontiguous district includes 275 properties containing 19th and 20th century industrial and commercial buildings throughout the city.

### Providence Steel and Iron Company (PSI)

The Steel Yard is located in the historic Providence Steel and Iron Company (PSI) complex along the Woonasquatucket River in the heart of Providence's "Industrial Valley" district. PSI was formed as a subsidiary of Builders Iron Foundry (BIF), a Providence company established in 1822 that produced iron castings, water meters and architectural iron work including the iron and marble stairs for the Library of Congress (according to the National Register of Historic Places Registration Form). BIF purchased the property at the corner of Sims and Kinsley Avenues for construction of a structural steel shop in 1902. The business was incorporated as Providence Steel and Iron Company (PSI) in 1905.

Between 1902 and 1937 the company acquired additional land and constructed a complex of buildings including one-story and two-story



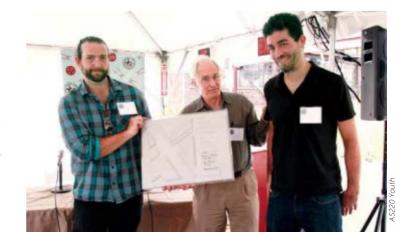
Clockwise from top: Providence Iron and Steel, Clay Rockefeller and Nick Bauta (with Simeon Bruner), the site prior to remediation



brick buildings, an ornamental iron works shop (with extensions), a brick office building, a bar shop and a stockyard crane. Over the next decades the company produced steel shapes and products for bridges and buildings. The business continued to operate as a steel fabrication plant on a limited scale until it was purchased by the founders of The Steel Yard. The former owner was very supportive of the purchase, knowing that the site would remain in the industrial arts.

### **PROJECT HISTORY**

The Steel Yard was founded by Clay Rockefeller and Nick Bauta, artists and "makers" who envisioned the former Providence Steel and Iron Company property as "the yard" where artists could come together in a creative "playground" to share ideas and resources and make things. Graduates of local universities, they developed a strong connection to Providence and appreciation for the industrial buildings in the Valley and Olneyville neighborhoods on the city's West Side. They were inspired by seeing Jane Jacobs speak at a conference in Toronto and shared lunch with her afterwards. Both came from wealthy families – Bauta is the grandson of Canadian food magnate W. Garfield Weston and Rockefeller is the great-great-grandson of John D. Rockefeller –





Above: Monohasset Mill; Below: The site prior to remediation

and had access to financial resources to invest in a project that realized their vision.

A Rhode Island School of Design graduate, Nick Bauta is an artist and entrepreneur who designs and fabricates leather jewelry and clothes, urban furniture and metal sculpture, and develops arts-related properties and businesses. He is the owner and developer of Fête and Firehouse 13, arts incubator spaces housing two of Providence's live performance venues. Bauta lives in Monohasset Mill and has a studio in the building he and Rockefeller own adjacent to The Steel Yard. He is active in the Providence arts community, and continues to serve as an advisor to The Steel Yard. Clay Rockefeller is an artist/entrepreneur and graduate of Brown University. Prior to co-founding The Steel Yard, he partnered with three other developers to renovate the former Armington & Sims Engine Company, a historic four-story brick mill building across from Eagle Square and bordering The Steel Yard property, in 2002 into 39 artist live/work spaces now known as Monohasset Mill, where he lives with his family. Rockefeller served as a board member and volunteer at The Steel Yard and, like Bauta, has remained involved. He is also active in several local and national nonprofits including the David Rockefeller Fund and Rockefeller Philanthropy Advisors.

Bauta and Rockefeller were living in Monohasset Mill when the former Providence Steel & Iron (PSI) came on the market. They paid \$1.5 million for the 3.5-acre property, which included several buildings, equipment and trucks. The two founders established a nonprofit organization in conjunction with the purchase of the building and began offering classes and workshop space to area artists.











Now doing business as The Steel Yard, the 501(c)3 non-profit organization was incorporated in 2002 as the Woonasquatucket Valley Community Build (WVCB). According to its documentation:

The WVCB Inc. acts as a catalyst in the creative revitalization of the industrial valley district of Providence, Rhode Island. In fostering the industrial arts and incubating small business, the Corporation seeks to cultivate an environment of experimentation and a community strengthened by creative networks.

According to former Executive Director Drake Patten, in the early years the organization and its founders operated on hope and faith in their vision of what The Steel Yard could become. They learned as they

The site before and during remediation

went along with advice from a number of mentors, including architect and current board chair Peter Case, local developers, and others in the Providence's tightly networked community. The personal contacts that were available because of the small scale of Providence's artist and non-profit community contributed to making this project possible. The Crucible in Oakland, California and Sloss Furnaces in Birmingham, Alabama provided inspiration and models for building a creative community focused on the industrial arts.

### **ORGANIZATIONAL LEADERSHIP**

Today the organization offers educational programs, workforce training, fabrication space and events that provide opportunities for people to engage in and continue the legacy of the industrial arts. With over 9,000 square feet of workshop and studio space, including a foundry, metalworking shop, ceramics studio, and blacksmithing department, The Steel Yard serves as an incubator for the development of new ideas, projects, and partnerships.

The Steel Yard founders hired Peter Eiermann as the organization's first executive director. Eiermann, characterized as a "chronic entrepreneur," was brought in to get the earliest programs going on the site with the understanding that he would serve for about three years. He oversaw an initial series of design charrettes that solicited input from The Steel Yard's growing community of "yardies."

Over time the founders realized that they needed an executive director who could help the organization grow and expand its programming in quality and offerings, which led to hiring Drake Patten in 2006. Rockefeller first met Patten when he approached the Rhode Island Council on the Humanities for funding. He was familiar with her work at the Millay Colony and sensed she would bring the necessary blend of determination and experience with nonprofit management and arts organizations, so he invited her to join the organization.

Patten, who has a background in anthropology and archeology, enjoys "turning things around." Her initial task was to bring order to the organization's "wild west" culture and manage brownfield cleanup of the site. Some remediation work had already been completed in 2002 and planning for the environmental cap was underway. When it became apparent that the organization needed a "master plan" to inform the development of the site, Patten led the staff through a strategic planning process.



The Steel Yard staff

After succeeding in helping the organization grow and complete its site improvements, Patten resigned in early 2013 to pursue new endeavors. She left The Steel Yard in the capable hands of the board of directors and staff. Her successor, Helen Lang, was in place in April 2013.

At the time of our site visit, the Steel Yard employed four full-time and two part-time staff. In addition to the executive director, the full-time staff included an associate director, a director of Public Projects and a program director. Part-time personnel included an art production manager and a communications director/volunteer coordinator. The Steel Yard has a way of involving and keeping interesting and creative people. Most of the staff are practicing artists and several first became involved with the organization as program participants or class instructors. At least three had worked for the organization for five years or more, progressing from prior positions into their current ones. Paul lannelli, a former employee of PSI, who worked on the site for over 50 years, was asked to stay on to become a groundskeeper for the new owners. The organization has also employed AmeriCorps VISTA members. At the time of the writing of this report, sixteen additional people were listed as instructors for classes.

The Steel Yard is governed by a "working" board of directors that includes ten people and meets monthly. The two founders served as board members in the early years. Members at the time of our visit included an architect and practicing artists. Each board member contributes financially to the organization. The organization has received support from the Rhode Island Foundation for board development.

### Speakers' Corner in Roger Williams National Memorial

### **PROGRAMS, EVENTS AND PARTNERS**

The Steel Yard hosts a variety of activities that help people access the industrial arts, including classes, events and workshop space for artists. In its relatively short life span, the organization has developed a number of popular programs and events that offer opportunities for area businesses, families, individuals and youth from across the Providence area to engage with The Steel Yard site and its art, educational and workforce development resources.

### Camp Metalhead

Launched in 2005, Camp Metalhead provides a two-week intensive introduction to creative metal fabrication for 14- to 18-year-olds. The program culminates with the students designing and implementing a commissioned public art project. In 2011 Camp Metalhead participants, sponsored by Groundwork Providence in collaboration with the National Park Service, designed and produced recycling receptacles and a "Speaker's Corner" for Roger Williams National Memorial. 78 students have participated in the program since its inception.





Clockwise from top left: products designed and produced at The Steel Yard including Kennedy Plaza railings, trash cans, and bike racks

### **Public Projects**

The Public Projects program started in 2004 as Urban Furniture. According to a detailed business plan completed in 2007, it is "an earned income initiative designed to unite the educational and creative aspects of The Steel Yard's mission." Through it Steel Yard staff collaborate with local artists, industry and vendors to produce sitespecific public sculpture and street furniture. The program produces practical yet individually designed products like benches, bike racks, fencing and trash cans in quantity, as well as one-of-a-kind objects like community bulletin boards, narrative fence panels and decorative gates. The products, identified by The Steel Yard logo, are visible throughout the city. Recent installations include railings in an Olneyville housing project and Kennedy Plaza downtown. The Steel Yard targets organizations that serve as stewards of public space for commissions and clients have included the City of Providence, neighborhood organizations, and nonprofits.

Between 2004 and 2013 The Steel Yard collaborated with over 200 individual artists and students, generating over \$250,000 in commissions to community artists, and producing 333 receptacles, 105 tree guards, 124 bike racks, 25 benches, 111 planters and 14 fences. Gross program revenues have increased steadily, from \$25,000 in 2004 to \$250,000 in 2013.

Recent clients have included The City of Providence (bike racks and playground gate), Roger Williams National Memorial (recycling bins), RiverzEdge Art Center (skateboard press), Smith Hill Community Development Corporation (fencing), West Broadway Neighborhood Association (community kiosks) and William D'Abate Elementary School (fencing and bike racks).

### Weld to Work

The Weld to Work program began in 2009 as the Workforce Training Program. It is a three-week course for low-income 18 to 24 yearolds that provides an introduction to the field of metalworking and fabrication as well as professional work experience. Classes are small – no more than five to eight students – and provide hands-on training 2013 RUDY BRUNER AWARD





Welding and ceramics classes

in metalworking and fabrication as well as tours of local galleries, museums and fabrication businesses. At the conclusion of the program each student designs and fabricates a unique bike rack.

There were 81 participants in the Weld-to-Work/Workforce Development program between 2009 and April 2013, 75 of whom graduated. Steel Yard staff note the high retention rate as an accomplishment, although graduation from the program does not necessarily result in a job. Nor is it intended to, as staff and partners see the program as more about creativity, interest, and developing skills than as formal job training. Even so, the organization is looking into opportunities to strengthen connections with area nonprofits – including the Institute for the Study and Practice of Nonviolence, Open Doors and Youth Build Rhode Island – and businesses to better tap into potential students and connect future graduates with job opportunities. They are also discussing the value of offering a professional certification.



### Classes

The Steel Yard first started offering classes in 2004 and listed blacksmithing, ceramics, jewelry, metalworking, foundry and blacksmithing, and welding courses on its web site in 2013. Classes are offered from March through November (they are discontinued in the winter due to unheated buildings) and take the form of weekend workshops targeted for beginners and corporate groups and four- to ten- week courses for students seeking more opportunity for instruction. Participation has been steadily growing. 321 people participated in open enrollment classes in 2012, and The Steel Yard also offered Youth Open Studios approximately 25 times, free of charge for attendees. Students come from Rhode Island, Connecticut and Massachusetts.





Events include the Halloween Iron Pour and Cruise Night



OUR 7TH ANNUAL CLASSIC CAR, CUSTOM, AND BICYCLE SNOW. BRING THE WHOLE FAMILY FOR AN EVENING OF POLISHED CHROME, MUSIC, RAFFLE PRIZES AND STUDIO TOURS.

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### Events

In recent years the site has been host to four large, programmed events from March through November as well as occasional movie nights. These events include:

Halloween Iron Pour – Initiated in 2007, this annual performance event draws 1000 to 2000 people to The Steel Yard. Hosted with the Iron Guild, it features regional artists, live music and the pouring of molten iron.

**Iron Chef** – First held in 2008, this competitive, judged event was modeled on the "Iron Chef" cooking show. Teams of artists were given scrap metal and a fixed amount of time to design and fabricate a piece of sculpture. The popular, fall event was held for five years in a row but has been discontinued due to the staff time required to coordinate.

**Wooly Festival** – This annual DYI (do-it-yourself) art festival or "urban country fair" is organized by artist and Former Steel Yard board member Sam White and took place for the first time in 2007. According to the event website, "the Woolies are dedicated to developing a society of brave interaction and aesthetics through a progression of surreal, spectacular, people-driven events."

**Cruise Night** – Held every year since 2006, The Steel Yard's Cruise Night brings together custom and classic vehicle car and motorcycle enthusiasts from the region and supports the organization's Works in Progress fundraising program. The events are organized by ground-skeeper Paul Iannelli.

### Rentals

The organization derives revenue from renting its facilities and outdoors spaces on a short-term and more permanent basis to artists, businesses, and private individuals and events.

Studio Rentals – Open studios are offered weekly and classroom and studio space is available for rent for on a pay-as-you-go hourly basis and as negotiated for longer terms. The campus includes a ceramics cooperative that offers memberships that provide access to studio space and kilns. Workshop space is often rented to artists needing space to fabricate large projects.

**Event Rentals** – The most recent program addition and revenue generator is rental of the property – including the Movie Platform, Commons and Back Forty – for private events including weddings and performances between April and October.

**Tenants** – The Steel Yard leases space in the office building to several businesses. In 2013 these included Woonasquatucket River Watershed Council, Fire Tower Engineered Timber and West Side Sewing Studio.

### **COMMUNITY PARTNERS**

The Steel Yard partners with artists, businesses, nonprofits and public agencies to connect its programs with other resources and opportunities in the community. These partnerships reflect the organization's commitment to Providence, sense of social responsibility, and standing as a community resource.



Sims Avenue office building

### Artists

Artists are vital to The Steel Yard's mission and work. The organization engages local artists as board members, class instructors, designers for its Public Projects, staff and tenants. It also offers referrals to projects commissioned by private individuals (The Steel Yard will only take commissions from nonprofit and public clients). For local artists, the organization and its campus offer access to fabrication facilities and tools, events and networking that support their craft.

### **Businesses/Corporations**

The Steel Yard enjoys enthusiastic support from a cohort of local manufacturing businesses including Bullard Abrasives, Industrial Welder's Supply and Mid City Steel. These businesses provide a combination of cash and in-kind support in the form of donated equipment and materials including space heaters, tools and accessories, gas and steel.

The Steel Yard has done an excellent job of helping their corporate partners feel connected to and involved with the organization. These partners indicated that they appreciate the aspects of The Steel Yard that relate to their own industrial business operations, including its reuse and extensive remediation of this historic site, as well as its role as resource for the community. The corporate partners admire the organization's youthful, passionate staff and their earnest, responsible approach to doing business. They particularly noted the attention that Steel Yard staff pay to personal relationships, such as inviting corporate partners to join them for special occasions at the Yard, bringing Weldto-Work classes to the their places of business, and even taking the time to acknowledge personal events like a death in their family. One businessman cited 200 to 300 personal interactions with Steel Yard staff over seven to eight years.

These partners showed a palpable enthusiasm for The Steel Yard; one even referred to falling in love with the "charm of the place." He encourages his coworkers to take classes there and his customers to contribute tools and finishing products. Another noted that his 120 employees love the organization. All spoke with pride at the extent to which the organization has touched the city with its Public Project street furniture with The Steel Yard logo.

### Foundations & Public Agencies

The Steel Yard has received financial support from the Rhode Island State Council on the Arts for the past ten to twelve years. The agency admires the way the organization does business and considers the volume of Public Projects commissions and products installed throughout the city to be a reflection of the organization's value in the community. The Steel Yard's work is viewed by peers as exemplary.

### Nonprofits/Social Service Agencies

The Steel Yard is partnering with local organizations like the Institute for the Study and Practice of Nonviolence, Open Doors and Groundwork Providence to connect their programs and products with other resources in the community. The organization is considering offering the program to other demographic audiences and is seeking more sustainable funding streams.

The Institute for the Study and Practice of Nonviolence works with formerly incarcerated and gang involved youth. Forty percent of people in Rhode Island prisons are from Providence and most return when they are released. Manufacturing is one of few industries where a criminal record isn't necessarily a barrier and the organization has sent seven or eight individuals to The Steel Yard's *Weld to Work* program over the past two to three years. The organization pays for the participant's tuition and provides case management and support. They credit The Steel Yard for its willingness to work with high-risk individuals, and for bringing art into a community where it hasn't been accessible in the past. Open Doors, a nonprofit social service agency that works with adult population from the criminal justice system, approached The Steel Yard when it wanted to include art in a housing project it was developing and to learn more about its programs. The Steel Yard produced a bike rack for their site and the relationship deepened to include discussions about using Steel Yard programs for Open Door clients, although only one person has been referred to the Weld to Work program to date. The organization wants to be able to offer its clients exposure to different fields, including metal work and welding, but most of their clients don't fit the age group for this program and are seeking immediate employment.

Groundwork Providence provides environmental training for area youth. The organization has partnered with The Steel Yard on several of its summer youth "Green Teams" programs. Teens in the program have planted trees on The Steel Yard property and worked with Steel Yard through its Camp MetalHead program and National Park Service staff to design and build recycling containers and a Speakers' Corner at Roger Williams National Monument. Partnering provides an opportunity to expose area youth to art and help them learn how it is possible to bring design to functional items. Overall, over 30 area youth have participated in Groundwork Providence programs that involved a partnership with The Steel Yard.

### SITE DESIGN AND DEVELOPMENT

The 3.5-acre Steel Yard property includes two clusters of modest brick and metal buildings that total approximately 10,000 square feet of interior space and about 12,000 square feet of outdoor space. The buildings are designated historic landmarks by the Rhode Island

Historical Preservation and Heritage Commission and the National Register of Historic Places. In addition to the historic structures, the site includes gantry cranes dating from the property's use by a steel fabricator.

According to the Providence Steel and Iron Company National Register of Historic Places nomination form, the property's historic significance is derived from being an example of "a surviving, relatively intact example of a local structural steel and ornamental iron works as it evolved physically over an approximately fifty-year period," and its early use of electrical lighting and power.

### Remediation

Remediation of the brownfield site was the major hurdle The Steel Yard had to overcome in order to move from its informal beginnings to an organization with a mission, ongoing programs and staff. It is also the theme that dominated Patten's tenure as executive director.

After first expressing interest in the purchase of the property Rockefeller and Bauta hired a local environmental engineering consultant to conduct an initial investigation, including Phase I and II environmental assessments, of potential contamination on the site.

The investigation was completed in 2001 and found arsenic contamination and very high concentrations of lead, exceeding 10,000 parts per million (ppm) – an order of magnitude higher than the 400 ppm level considered sufficient to be of concern for health or the 1000 ppm level commonly found in steel yards. These hazardous concentrations triggered notification to the Rhode Island Department of Environmental Management (RIDEM). While RIDEM was aware of manufacturing in the area, it was not aware of the very high levels of contamination on the property. The high concentrations suggested to RIDEM officials that lead was used in industrial processes and/or storage.

Clay and Bauta created a new legal entity, Milhaus LLC, which purchased the site in late 2001 with the buildings and much of the existing equipment, including the gantry cranes that contribute to the site's distinctive industrial character. With their assessment in hand, they signed a nondisclosure agreement taking responsibility for and acknowledging the environmental contamination on the site.

RIDEM subsequently required Milhaus LLC to prepare a remedial action work plan that addressed cleanup and reduction of contaminated materials on the site to meet requirements for the proposed educational use. The agency also required testing of ground water for contamination.

At this point Milhaus LLC engaged Jacques Whitford, an environmental consulting services firm (since acquired by Stantec), to conduct additional testing and develop the remedial action work plan required by the RIDEM. A plan was completed and approved by RIDEM and provided the guide and parameters for remediation.

An initial phase of remediation, completed in 2002, included removal of the most contaminated material and stabilizing the rest. Stabilization entailed treating the remainder of the contaminated soil with FESI-BOND<sup>™</sup>, a chemical binder that prevents lead from leaching out of the soil. This approach was new to Rhode Island and required special research and approval by RIDEM.

Founders' building

The remedial action work plan required an environmental cap for the entire site. Jacques Whitford completed a design and the project was put out to bid, but when the cost came in higher than expected the project was put on hold until additional resources could be secured.

Under Patten's leadership in 2007, planning for the site cap resumed with more focused attention. The organization clarified its vision and goals for the project and expanded the scope of services for environmental planning beyond the design for the cap to include a more comprehensive approach that considered the site and buildings within the context of the organization's long-term vision. It addressed current needs as well as potential expansion of programming and facilities.

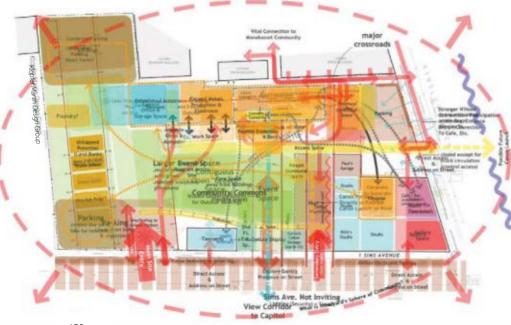
At this point the ownership of the property was restructured. The property was divided into three lots, with Millhaus LLC selling two to The Steel Yard, with Bauta and Rockefeller retaining the remaining lot with the corner building for themselves. This change in ownership allowed The Steel Yard, as a nonprofit, to seek federal EPA Brownfield Cleanup grants and other funding to support the remediation of its two lots.



### Design

The Steel Yard engaged Klopfer Martin Design Group (KMDG) – a Boston architecture, landscape architecture and planning firm – to develop a master plan for the site. Mark Klopfer, one of the firm's principals, had worked on The Steel Yard cap design while employed with Jacques Whitford, and proposed a planning process that incorporated input from people within the organization and surrounding community.

KMDG and Patten met with Steel Yard staff, board members, teachers and students as well as neighboring businesses and residents, including Monohasset Mills, to solicit input and ideas for the site. They translated all the information they gathered from these discussions into a single diagram that illustrates the complexity of and overlaps between existing and anticipated activities taking place on the site.



Overall, the discussions yielded the sense that The Steel Yard was and should continue to serve as the community's "yard". Some of the people involved feared that the capped, cleaned and redesigned space would not retain the quality of an urban wild and chaotic space that everyone loved. There was a strong desire for the new design to reflect the site's historic use as a steel fabrication facility.

Key design ideas that emerged from the planning process include:

- Creating a central green zone or community commons
- Addressing entrance and access needs for pedestrians and vehicles, retaining the historic entrance, and providing paving and clearances required for tractor trailer deliveries
- Recognizing the untapped potential of site as an arts campus
- Retaining the un-kept, "urban wild" character of the site
- Recognizing that much building and creating occurred out-ofdoors – considering the landscape as a place to work
- Allowing room for growth and change

Key design objectives for the master plan included reducing soil disturbance, reconciling grade displacement caused by removal of contaminated soil and introduction of clean fill, and reintroducing "urban wild" native vegetation and habitat. From the beginning, it was important to The Steel Yard and its founders that they retain as much of the contaminated material on site as possible rather than moving it elsewhere. They believed it would be unethical to solve their local environmental problem by dumping contaminated soil elsewhere. This was fundamental to the goal of reducing soil disturbance. It also helped to reduce the overall cost of remediation and contributed to the creative approach to the site's design.

Diagram illustrating consolidation of ideas generated through community input Opposite: Existing conditions and master plan



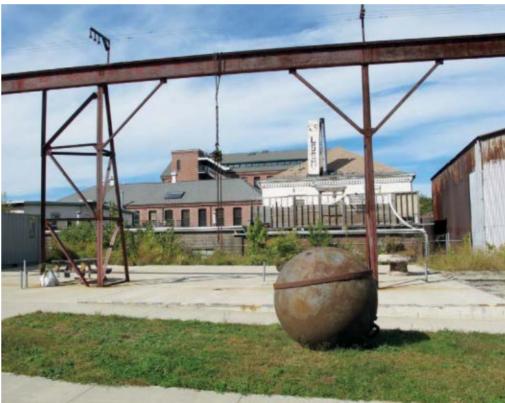
Klopfer Martin Design Group



The completed design reflects the property's history as a steel fabrication facility. Three large fabrication shops enclosed with corrugated metal siding remain and form the back edge of the site. Existing onsite railroad tracks that served the site and gantry cranes had to be removed, though the cranes were retained. Salvaged steel from the site and elsewhere has been recycled into the corrugated sheet pile and bales of scrap metal that form retaining walls along the edges of the landforms.

KMDG, along with sub-consultants Beacon Morris Design and EA Engineering, developed a master plan for the site and design for the environmental cap. It addressed the site design as well as the buildings, taking into account the current footprints of structures as well as conceptual designs for additions. This master plan informed the locations of utilities, including conduit and stubs for future plumbing and wiring and paving so that future expansion of enclosed workshop space could be accommodated without disturbing the soil.

Working with a budget under \$1 million (\$8-8.50/sf) KMDG and its team of consultants developed the cap design for the site. Excavation represented the major cost of the first round of work.



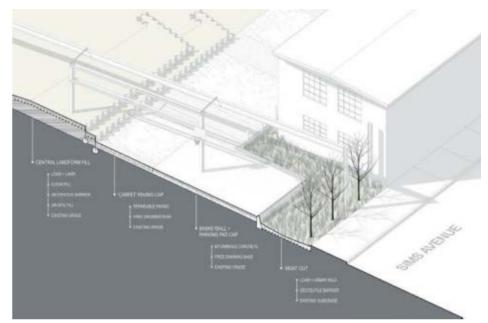
Clockwise from top left: Scrap metal bales, sheet pile, utility hook-ups and concrete pads for future expansion Photos top left and middle by Christian Phillips Photography

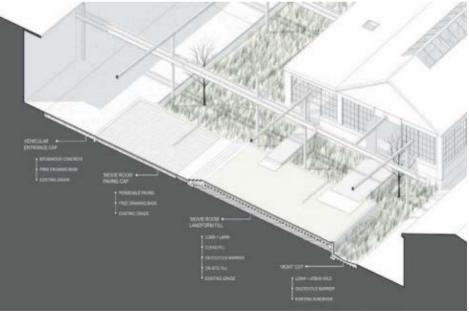
The design includes moats that separate the paved areas from buildings and help to mitigate the changes in grade between finish floors in buildings and higher pavement grades due to capping. Moats direct stormwater into a bio swale that captures, stores and filters the water before it percolates into the soil. The contaminated soil was organized into several landforms including the central lawn or "Commons", "Back Forty" and "Movie Platform". These earthworks were important to the strategy for reducing export of contaminated soil.

The site today includes a central open space capable of hosting large events surrounded by secondary spaces suitable for indoor/outdoor fabrication and smaller events. The property also includes areas for storing materials and finished pieces as well as displaying artwork. The spaces are designed to be flexible, allowing "anything" to happen and support ad hoc creative activities.

Landscaped and paved areas are interspersed throughout the site. Paved areas serve as driveways, outdoor workspaces, walkways and places for parking cars. The design team worked with the City to interpret the zoning code with respect to site use and parking requirements. They negotiated a solution that minimized the number of required onsite spaces to 20 by taking advantage of available on-street parking and allowing cars to park informally throughout the paved areas rather than in one designated "parking lot".

The remediation plan required a "cap" or layer of twelve inches of clean fill or pavement across the site to contain and limit exposure to contaminated soil on the site. The site design includes nine different kinds of environmental "caps". These include "hard" paving such as concrete and bituminous asphalt; porous paving materials including





Diagrams illustrating environmental caps



permeable concrete, concrete pavers, grasscrete and crushed stone; and "soft" landscaped areas such as bio swales and lawns. In the case of planted areas, geotextile fabric separates the contaminated soil from clean fill. Each cap responds to the programmed use, and the variety provides visual interest and texture across the site.

Plants were selected to retain the desired "urban wild" look that existed before remediation. An "urban seed" mixture suitable for the environment was created using plants that spread and colonize easily. Plants suitable for moist and wet locations were selected for the moats. Turf suitable for outdoor seating was used on the "Commons" and "Movie Room", while sumac and tall grasses were chosen to screen the Yard from adjacent properties and provide visual interest and color. The Steel Yard hosted a volunteer planting event on Arbor Day in April 2010 drawing support from 192 volunteers including youth participating in a Groundwork Providence program.

### Negotiating the Environmental Remediation

Negotiating the process of acquiring approvals for the site design was complex and time consuming. requiring negotiations with the EPA, Rhode Island Department of Environmental Management (RIDEM) and other environmental organizations, including the Rhode Island Coastal Resources Management Council (RICRMC) and Narragansett Bay Commission (NBC). In the end it took about a year to obtain approval for them all.

The Steel Yard applied to the Environmental Protection Agency (EPA) for funding for the cleanup and received two grants totaling \$400,000 – one for each parcel of land. As is typical, EPA officials assigned management of the grants to the local environmental agency – in this case RIDEM.

RIDEM holds final authority for approving environmental remediation plans, identifying other affected agencies and requiring them to sign off and/or approve before issuing approval for the plan. The agency holds joint application meetings for new projects under the office of customer technical assistance that bring together agencies involved in the approvals process. However working on this project with NBC and RICRMC, which are concerned with discharge into the river and bay, was new for RIDEM.

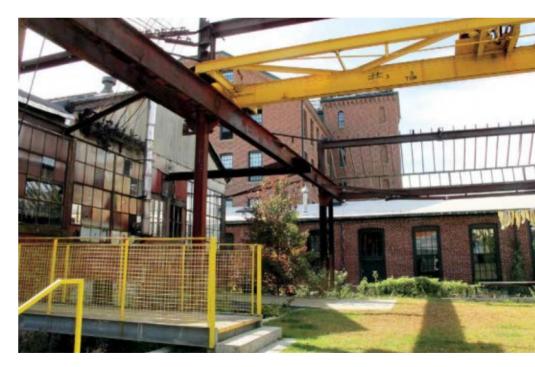
The most challenging aspect involved the treatment of stormwater from the site. Like many public agencies concerned with aging, overwhelmed combined stormwater and sewage systems, RIDEM wanted to reduce stormwater discharge into the sewer system yet didn't want to allow contaminated storm water to remain on site. NBC and RICRMC on the other hand, were primarily concerned with stormwater carrying contaminants from the site leaching into the neighboring Woonasquatucket River and Narragansett Bay.

According to the environmental engineer, the project was initially designed so that the water runoff from the site would tie into the city's storm water system. When the design was ninety percent complete, however, RIDEM modified its position to require seventy-five percent of the storm water to remain on site, requiring significant reworking of plans.

Adding to the challenge was the lack of communication and coordination between state agencies involved in the process. The Steel Yard convened meetings with representatives in an effort to broker conversation and support the negotiations. Pattern turned to The Steel Yard's team of consultants, the EPA, and other environmental

engineers and projects to find data on remediation that could inform their approach and negotiations. For example, The Steel Yard and its consultants were able to convince RIDEM to allow the use of permeable paving on the site.

Although The Steel Yard eventually succeeded in getting the necessary agency approvals, the process was slow and frustrating. The organization and its consultants armed themselves with research and examples of other projects that they used to convince public agencies to try new approaches, such as the use of a binder to address the lead problem, environmental caps and stormwater management.



"The Movie Room"

Although they became more knowledgeable about the process and technical aspects of remediation over time, they were frustrated by the perceived lack of action on the part of the public agencies. Patten employed increasingly aggressive tactics to get responses from RIDEM, including contacting supervisors and asking then Mayor David Cicilline for help. RIDEM staff, however, indicated that the nature and length of the process were not atypical for a federally funded project because of a prescribed series of steps and approvals.

The Steel Yard, consultants and RIDEM representatives all attest to the value of the project as a model for remediating urban sites and the EPA has documented it as a valuable case study. For example, the number and variety of environmental caps utilized on the site is unusual and illustrates alternatives to the more typical approach to capping which would have been to add a two foot layer of clean fill and cover it with asphalt paving. The Steel Yard staff, consultants and RIDEM representatives acknowledge having learned a lot through this process, including the approach to storm water management, and working with NBC and CRM.

The environmental caps will require regular maintenance to ensure that the remedy remains intact and there is not exposure to contaminated materials. RIDEM required the attachment of an environmental land use restriction to all three lots as well as annual reports from inspections of the caps.

Site construction began in August 2009 and The Steel Yard remained open through completion of construction one year later. Patten served as the onsite project manager during construction, negotiating with environmental agencies and contractors. The Steel Yard was able to reduce overall construction cost by providing prompt payments to Catalano, the contractor, and by convincing them to accept substitutions and in-kind contribution of materials.

Given the chance to do it again, The Steel Yard and their design team indicated that they would be more savvy about what exactly was needed from each party in regard to expertise and process and how to better coordinate efforts. For example, Klopfer Martin has a better understanding of what they needed in an environmental engineer. At the time the firm worked with several before identifying one that completed the design and they acknowledge that an engineer more connected to DEM might have helped. Also, addressing stormwater management and recharge is a relatively new issue for cities and planning for The Steel Yard remediation took place while RIDEM was developing new policies that changed the requirements during the development process. There was consensus among the group that the complexity and time-consuming process of negotiating with state agencies can be a deterrent to adaptive reuse of brownfield sites and that prescriptive approaches do not work for urban infill sites.



Sims Avenue entrance

### Buildings

The property includes two buildings – a two-story brick structure on Sims Avenue that houses The Steel Yard offices and three tenants and a series of connected brick and metal structures that house fabrication and studio space. All exterior improvements are subject to state historic review.

The master plan completed by KMDG considered improvements to the buildings as well as the site, including relocating activities within existing buildings and constructing new additions and structures. However, environmental remediation has been the organization's primary focus to date. Other than renovation of the Sims Avenue structure, improvements and changes to the original PSI structures have been modest.

The founders completed renovations to the Sims Avenue building soon after the property was purchased to provide finished space for classrooms and offices. The unheated workshop structures remain largely untouched from the days when the property functioned as a steel fabricator and retain a rustic, functional industrial look. Modest improvements have been made to accommodate studio and classroom use. These include installation of a jewelry studio and reglazing of broken or missing window glass. A new roof and galvanized metal façade on the center workshop was installed after the existing ones were peeled off in a storm. The new roof was constructed using a structurally insulated panel system (SIPS) and includes framed openings for future skylights. Spray-in insulation was added to the new façade and other areas. Puddles of water on the floor of the adjoining workshop building were evidence of continued roof leaks.

Views of the workshop







### **CURRENT AND FUTURE PLANS**

As it celebrated its tenth anniversary in 2013, The Steel Yard entered a new phase of its development. Two years after the completion of the remediation of the site, the organization looked to the future as it welcomed a new executive director and considers how it can do more with its campus and programs while, like many nonprofits, seeking to ensure its long-term financial sustainability.

When Patten announced her intention to resign, the board initiated a national search, seeking a community-minded leader with knowledge of the arts and experienced in building fiscal strength, which resulted in hiring Helen Lang as the new Executive Director in early 2013.

Lang has held a variety of positions in the arts and nonprofit management, including the Tribeca Film Institute and the Trisha Brown Dance Company. While she brought enthusiasm and substantial, relevant experience and skills to her role, Lang had the challenging task of following a charismatic, well-liked leader. The board encouraged her to increase The Steel Yard's presence in the national arts scene while keeping its existing constituents and community engaged. During her tenure, Lang built upon the strong organizational base and programs, making the most of the completed site and increasing site rentals, expanding educational programs with Program Director Islay Taylor, and starting new artist-led initiatives with Public Projects.

In late 2013 Lang resigned for personal reasons, leaving The Steel Yard in the hands of a capable, committed and enthusiastic staff, many of whom had been part of the organization's evolution and start-up and growth of key programs. At the request of the board, long-time staff member and Public Projects Director Howie Sneider stepped in to become the Executive Director. Sneider first came to The Steel Yard in 2004 as an artist renting studio space and instructor of the first weekend welding workshop class. He became Public Project Director in 2005, more than tripling the growth of the program. Sneider assumes the role of Director as The Steel Yard looks to strengthen connections with supporters in the arts and design community and launch a new a strategic planning process.

Small business incubation has been core to The Steel Yard's mission. There is interest in expanding its programs, including Weld to Work and Public Projects. The organization conducts program evaluation using entrance and exit surveys taken by students and instructors that ask what works and doesn't, and constantly checks in with the community and artists. These efforts and discussions with existing and prospective partners suggest that there is potential to strengthen and the expand work force program. There is an unmet demand for welders in the state and The Steel Yard is considering ways to connect its graduates to other local welding programs that offer additional training and certification.

Increasing and maintaining financial sustainability will be critical. The board and its executive director are anxious to increase revenue by maximizing production and income from earned income ventures. Making better use of the property, now that site improvements are completed, will be a focus. The Steel Yard is currently negotiating with a dance company that is interested in using the site for performances. Repairs and capital improvements to the structures – including, at a minimum, new insulation, sheathing, roofing, windows, doors, lighting and heating – will be needed to allow increased, year-round use of indoor spaces and maximize the potential for programming and revenue generation.

October 2013 marked the tenth anniversary of The Steel Yard. The organization used the occasion to highlight its accomplishments, involve its community of "yardies" and increase its impact in Providence and elsewhere.

# FINANCING

#### Property

The Steel Yard property was initially purchased for \$1.5 million by the founders as Milhaus LLC. They invested an additional \$300,000 in environmental testing and site remediation and \$80,000 in renovating the Sims Avenue structure into office space.

It was always part of the plan to sell the property to nonprofit ownership, which occurred in 2007, allowing the property to be eligible for EPA funding. The founders subdivided the property into three lots, selling two to The Steel Yard for \$1.5 million and retaining the corner property and building for themselves which they have since converted into office and studio space.

The Steel Yard was unable to secure a conventional bank mortgage until the brownfield remediation was completed. The initial mortgage was held by Milhaus LLC and later, after its dissolution, by the two founders. The organization finally secured a 20-year, \$250,000 mortgage at 3.87% for the property from Bank Rhode Island in 2012.

When the founders purchased the property they negotiated tax stabilization with the City of Providence that froze the annual property tax for ten years at time of purchase. The stabilization has been conveyed to the nonprofit ownership and was renewed for an additional five years, ending in 2016. The Steel Yard has discussed the possibility of applying for tax-exempt status in the future.

As a National Register listed site, the entire property is eligible for historic tax credits. The founders utilized historic and New Markets tax credits to finance development of the corner building.

#### Capital Improvements

Site development costs, including brownfield cleanup, totaled \$1.2 million. Funding for the project included two EPA Brownfield Cleanup grants totaling \$400,000; \$199,000 from Rhode Island Economic Development Corporation (RIEDC)-managed EPA funds; a \$100,000 RIEDC Revolving Loan Program Ioan; \$100,000 from private fundraising; and \$300,000 invested by the founders when they first purchased the property (Table 1). Each EPA grant required a match of \$40,000 or a total of \$80,000 for funds that could only be used for contracting work. This \$80,000 match was generated by a "Yard by the Foot" campaign which "sold" one square foot sections of the Yard to donors for \$25 each and paid for professional consulting fees. This campaign reflected the organization's commitment to operate as a donor centric organization. The EPA RIEDC grant paid construction fees. The RIEDC loan was used as needed to close the financing for the project.

By utilizing donated and recycled materials, employing community efforts for obtaining and planting trees and vegetation, and minimizing the extent of civil engineering systems for storm water drainage and base course excavation of pavement, landscape construction costs were held to \$8 per foot for the two acres of site work. Donated materials used in construction had an estimated market value of to \$40,000 to \$50,000. In-kind labor included volunteer Arbor Day tree planting and volunteer labor throughout the course of the project to assist The Steel Yard with "staging" that allowed the organization to remain open during construction.

The organization planned a capital campaign to raise money for renovating the workshop buildings but elected to put it on hold in 2008 due to the challenging economic climate. Since then, the organization has fundraised on a project by project basis which they see as a more immediate way to engage donors. The Steel Yard implemented a special "Raise the Roof" campaign that, along with insurance money, funded the replacement of the roof on one of the workshop buildings.

# TABLE 1: CAPITAL IMPROVEMENT FUNDING SOURCES

#### **Capital Improvement Funding Sources**

EPA Brownfield Cleanup Grants Millhaus LLC RIEDC RIEDC Revolving Loan Program Private Fundraising	\$400,000 \$300,000 \$199,000
RIEDC RIEDC Revolving Loan Program Private Fundraising	\$199,000
RIEDC Revolving Loan Program Private Fundraising	
Private Fundraising	
	\$100,000
Vaud butten Enet Causanian	\$100,000
Yard by the Foot Campaign	\$80,000
Inkind Contributions (estimated)	\$40,000

#### Operating

The Steel Yard has an annual operating budget of approximately \$400,000 (Table 2). Forty percent of the organization's revenue is earned income (net cost of goods sold), the majority of which is generated by the Public Projects program commissions, which grosses \$250,000. The balance is comprised of tuition fees, rentals (site, studio and tenants) and product sales. Additional revenue includes foundations (25%), individual contributions (15%), corporate contributions and grants (10%), in-kind contributions (5%), special events (3%) and government grants (2%). The majority of expenses are attributed to personnel (60%), followed by occupancy (15%), programs (15%), and general (10%). Occupancy costs include mortgage interest and repayment of the EPA EDC loan.

After the financial crisis of 2008 The Steel Yard, like other nonprofits and businesses, needed to reduce expenses. The organization instituted a staff furlough during the month of January while the campus is closed for the winter. Initially the time off was unpaid. Later, after finances stabilized, full salaries were restored but the furlough continued on an annual basis as paid time off in lieu of salary raises. Initiated as a cost savings measure for the organization, the time is also viewed as an opportunity for staff to focus on personal artistic work.

The families of both founders have been important financial supporters of The Steel Yard's development and operations. The Steel Yard received a \$1 million gift to support mortgage reduction and capital improvements and \$30,000 a year in unrestricted funds from foundations connected to Nick Bauta's family, including the October Hill Foundation. Clay Rockefeller's family has contributed through its DR Fund and The Philanthropic Collaborative. His father

contributed \$250,000 to support capital improvements and several family members make regular gifts in response to the organization's annual appeal.

Funding to support Steel Yard programs is derived from a variety of sources. Funding for Weld to Work/Workforce Development includes support from the City of Providence, through the Department of Art, Culture and Tourism; corporate sources like Bank of America, Bank Rhode Island, Millennium Communications, Textron Inc., Umicore and Wal-Mart; local businesses and rotaries; and Otto H York Foundation.

The Rhode Island State Council on the Arts provides \$10,000 a year in operating support. Additional, recurring support for The Steel Yard has come from AmeriCorps VISTA, Apple Lane Foundation, Champlin Foundation, Fabricators and Manufacturers Association, Fidelity Charities, Gateway Investments Limited, Ocean State Charter Trust and the Workforce Investment Act.

### IMPACT

### Remediation: A Creative Approach

The Steel Yard is considered by its designers to be an important, "shining" example of low-impact development. The project is a case study that illustrates that brownfield remediation doesn't need to be one size fits all – it can be context sensitive, "green", fit an urban context, and address post-industrial sites. The use of multiple "caps" illustrates a creative alternative to the more common method of brownfield remediation that employs a single cap such as grass or asphalt paving, providing a more diverse and interesting landscape. The project incorporates an inventive approach to minimizing stormwater with limited budget.

## **TABLE 2: 2013 OPERATING BUDGET**

#### 2013 Operating Budget

Earned Revenue - General Expenses	(\$6,201
	\$664,701
General Expenses	\$54,918
Direct Costs (earned revenue)	\$197,530
Occupancy	\$118,056
Personnel	\$294,197
Uses	
	\$658,500
Earned Revenue (site use, public projects, courses)	\$388,000
Government Grants	\$10,000
Special Events Income	\$15,400
Inkind	\$20,000
Corporations	\$43,500
Individuals (restricted and unrestricted)	\$67,000
Foundation Grants (restricted and unrestricted)	\$114,600
Sources	

The project has been recognized with design awards from the American Society of Landscape Architects and the Boston Society of Landscape Architects. It has been cited as a case study by the EPA and in the book *Principles of Brownfield Regeneration: Cleanup, Design and Reuse of Derelict Land.* The project received a 2012 Social Impact award from Brownfield Renewal and the Environmental Council of Rhode Island's 2012 Senator John H. Chafee Award.

#### Artists and Industry: Connecting Creativity and History in Providence

The Steel Yard reflects many positive attributes of Providence, including the artistic, creative, entrepreneurial spirit that were as important to its industrial past as they are to the current economy. It offers a physical repository of buildings, equipment and skills that harken to the city's past and contribute to its future.

The Steel Yard generates objects of art and practical use that provide revenue for the organization and its artists, and add value to the city and its neighborhoods. More broadly, within the nonprofit sector, it is an example of social entrepreneurism, generating a high percentage of earned income.

The Steel Yard has diversified creative the forces in the city beyond the traditional institutions of Brown University and RISD and the city's east side. It brings people into parts of Providence that they otherwise wouldn't visit, and has reoriented the arts focus in the city westward, bridging the traditional arts community with the industrial west side.



"Urban wild"

#### Awards and Recognition

The Steel Yard's contributions to historic preservation have been recognized by the community. It has received historic preservation awards from Preserve Rhode Island, and Rhode Island Historical Preservation & Heritage Commission (Rhody Award), and Providence Preservation Society (Reuse & Neighborhood Preservation Award). In 2011 the project received the Providence Mayor's Citation for Reuse and Neighborhood Revitalization.

### "The Yard": Creating a Place for Community

From the beginning, The Steel Yard has been envisioned as an intergenerational community. While we do not have detailed information regarding demographics, the diversity of participants appears to have increased as the organization has evolved and expanded its programs to appeal to and engage a broader audience. Engaging the community has been an important aspect of the organization's operations.



The majority of the initial participants in the project were young artists and peers of The Steel Yard's founders, and they valued people like Paul lannelli who lent their experience and wisdom. During the planning process for the site, the organization held community input meetings that were conducted in English and Spanish. Over time, the early "yardies" started families and their children now play on the site. People that use the site today and think of it as their "yard" include these children and families; area youth and others - including underemployed and ex-offenders - engaged in welding programs; neighboring business people and residents; artists of all ages; local businesses that make in-kind and financial contributions; nonprofit organizations that co-host events, commission work and sponsor program participants; and city officials that point to The Steel Yard and its products installed throughout the community with pride. In 2012 alone the organization served close to 4,500 people through programs, workforce training and free or low-cost events.

The site improvements have enabled The Steel Yard to do more as an organization. It replaced a dangerous, toxic site with useful, community space. Neighbors of The Steel Yard refer to it as an "urban oasis" where they walk their dogs, watch outdoor movies and participate in barbeques.

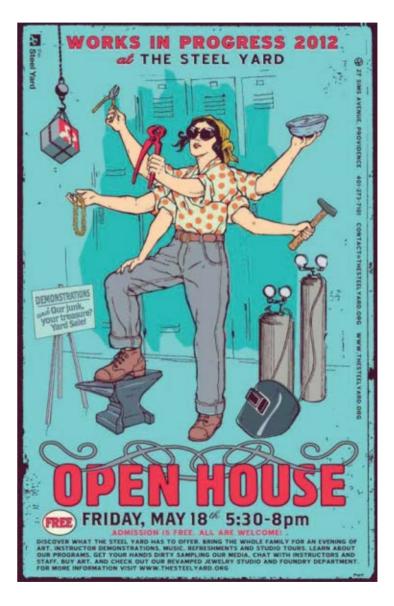
The Steel Yard is considered to be very inclusive, recognized by many as a place that invites, welcomes and fosters tolerance. Members of the "yardie" community have formed strong bonds. The organization itself has become a valued neighborhood organization that acts as a convener or hub for the community, with neighbors gathering there – one person suggested – like the way people come together around a barrel-fire to keep warm.

# Catalyzing Change

The Steel Yard organization and its people – its founders, staff, board of directors and friends – embody a gritty, can-do attitude and culture in the midst of what has been characterized as a risk adverse city. In their purchase of the property and creation of The Steel Yard, Clay Rockefeller and Nick Bauta contributed to city's recognition of the value of its industrial past and creative future. The founders continue to be involved with the organization and occupy the corner property. They are active in the broader community and arts organizations. Bauta went on to develop another property into an arts venue and Rockefeller is considered to be a growing philanthropist.

The organization's success illustrates the power of leverage and networks to make change in a small city like Providence. The impact is evidenced by the organization's contributions to the city's physical and social fabric, especially its growing arts community. A number of









developments have followed The Steel Yard to this neighborhood, including Box Office (an office complex built of re-purposed shipping containers), Paul Cuffee School (a developing charter school campus), Butcher Block Mills (shops and studios), Umicore (a \$7 billion international company involved in sustainable technology) and Waterfire Art Center (a public art performance developing its first home on a brownfield).

# Creativity and Risk Taking

The Steel Yard has opened eyes of many in the community to potential of creativity and risk taking. People involved in its development referred to it as a valuable experience. An overarching theme we heard in connection with The Steel Yard project was the notion that "there is always a way" and "there is no such thing as failure". No matter what the challenge – addressing contaminated soil, working with metal, etc. – it is possible to overcome and "will" things to happen.

The Steel Yard made use of an interestingly creative, organic and somewhat free-wheeling process. They started with a committed, passionate group of creative people and expanded toward community service in ways consistent with their arts mission – doing so in a way that is an ad hoc, yet thoughtful. They made connections, tried out new ideas, allowed people to experiment, resulting in new projects. On the other hand, the organization periodically pauses to reflect on what they have accomplished, what it has meant and where they want to go, engaging in thoughtful planning that addressed organizational development, strategic planning, business planning and facilities design. Based on these reflections and strategic planning efforts, some activities and ideas were expanded and new projects planned while others were dropped.

A retail tenant occupies part of the Founder's property (top), Mark Klopfer and Kaki Martin (bottom)

For the Klopfer Martin Design Group team, The Steel Yard demonstrated that it's possible to do more with less and to design an award-winning project on a shoestring. KMDG partner Kaki Martin noted that being open to risk taking provided freedom to experiment with the project's design, such as pursuing an unusual "urban wild" approach to landscape and using permeable concrete, recycled steel, and locally fabricated materials. The project was challenging yet rewarding and has become a benchmark for the firm. The collaboration and teamwork that infused the project influenced the then relatively new firm's founders and has become integrated into their approach and philosophy towards practice.

Reflecting on The Steel Yard's success, Rockefeller acknowledged the value of taking a "slow growth" approach to development that permitted the project to evolve organically over time, allowing for learning by doing, taking risks, and not being "afraid of what you don't know." Through this approach as well as with help from the community, the project generated a groundswell of support from local people and businesses as well as city hall.



# Assessing Success

# • Create a memorable and flexible space that embodies the organization's mission.

The resulting design creates a distinctive space that reflects the property's past as a steel fabrication site and present use as an industrial arts campus. It provides for flexible use for a variety of activities – including classes, events, and fabrication – that support The Steel Yard's mission as well as a community gathering spot. The use of recycled steel throughout speaks to the site's past and present use and the variety of open spaces promote opportunities for creativity and interaction.

#### • Engage the site's unique existing structures.

The design incorporates the property's historic features such as the workshops and gantry cranes. The landscape provides backdrops for onsite and adjacent buildings and connections with indoor classroom and production spaces.

#### • Utilize best sustainable practices within a constrained budget.

The site incorporates a variety of sustainable development techniques that address containment of contaminated soil and onsite stormwater collection and retention. The Steel Yard chose to retain as much contaminated material onsite as possible and to utilize a variety of methods to cap the site.

Lynn McCormack and Clay Rockefeller

# • Provide a public landscape to an underserved neighborhood of Providence.

When it is open, the site serves as a public space and is used by residents of the Valley and Olneyville neighborhoods. The fenced property is generally open 6am to 6pm, and as late as 10pm when evening classes are in session. Residents of Monohasset Mill have direct access to the property.

# • Serve as an example to others as to the potential for other local properties to be revitalized in nontraditional ways.

The Steel Yard has been recognized as a model for the remediation of a small, urban site.

### SELECTION COMMITTEE DISCUSSION

The Selection Committee commended The Steel Yard as an exemplary model of reuse and transformation. The project was recognized for its great design, including the approach to environmental remediation, as well as its engagement of artists and the community, social entrepreneurship, and role as an economic development catalyst.

The Committee suggested that The Steel Yard is a metaphor for Providence, tapping into its history and creative community to create a place that engages local talent and preserves the City's industrial heritage and culture in an authentic way. Members noted that the project not only honors the Providence's industrial past, but also creates a connection with contemporary artisans, celebrating industrial arts as an integral part of the City's economy and identity. The passion and youthful enthusiasm of the founders and The Steel Yard staff resonated with the Committee. They also appreciated the idea of



"Before" and "after" views of site

a "working yard" that is a combination of social space with work space. Members recognized the importance of programs in bringing people to the site and engaging the community.

The Steel Yard was also recognized for the approach that was taken to environmental remediation, suggesting it serves as an important model for alternative approaches to remediation. Members commended the organization for its philosophy toward remediation of the contaminated site, including The Steel Yard's commitment to addressing contamination issues.

The Selection Committee praised The Steel Yard for its entrepreneurial approach and willingness to experiment and try new things. The Steel Yard, like 2013 RBA Gold Medalist Inspiration Kitchens – Garfield Park and Silver Medalist Congo Street Initiative, factored into the Selection Committee's discussion of the growing role of the "maker" culture in shaping places. They highlighted the role of hands-on involvement of artists and community members, rather than government, in driving development. They noted that The Steel Yard illustrates another way of approaching and accessing resources.

While enthusiastic about the project, the Selection Committee acknowledged that it is a work in progress, and there is more to be done. Although The Steel Yard is well known in "maker" circles, it is less so in the broader community. The Committee suggested that the organization and project would benefit from more publicity and better PR.

As the Selection Committee observed, The Steel Yard "is all about the place and engages the real possibilities of community" and provides inspiration for similar industrial sites and spaces that exist in so many American cities.



# Resources

# **INTERVIEWS\***

The Steel Yard: Helen Lang, Executive Director Alma Carrillo, Program Director Brian Dowling, Associate Director Paul Iannelli, Groundskeeper, The Steel Yard; former employee, Providence Steel and Iron Company Howie Sneider, Public Projects Director Tim Ferland, Art Production Manager Islay Taylor, Communications Director and Volunteer Coordinator Clay Rockefeller, Founder Nick Bauta, Founder Drake Patten, Former Executive Director Jackson Morley, Former Volunteer and Communications Coordinator Peter Case, Architect/Principal, Truth Box Inc.; Board Chair Lee Corley, Artist and Instructor Anna Shapiro, Artist, Instructor and Board Member

# Design and Engineering:

Mark Klopfer, Principal, Klopfer Martin Design Group Kaki Martin, Principal, Klopfer Martin Design Group Jon Ford, Principal, Morris Beacon Design Frank Postma, Client Manager, EA Engineering

#### Public Agencies:

Lynn McCormack, Director, Art, Culture & Tourism, City of Providence Robert McMahon, Superintendent, City of Providence Parks Department Bonnie Nickerson, Director of Long-Range Planning, City of Providence John McNiff, Roger Williams Roger Williams National Monument Jennifer Smith, Site Manager, Roger Williams National Monument Randy Rosenbaum, Executive Director, Rhode Island State Council on the Arts Kelly Owens, Associate Supervising Engineer, Rhode Island Department of Environmental Management

Jeffrey Crawford, Principal Environmental Scientist, Rhode Island Department of Environmental Management

Valerie Talmage, Executive Director, Preserve Rhode Island Alan Peterson, Brownfields Project Director, Environmental Protection Agency

#### Community:

Andv Cutler, Founder, Cutler & Company Damien Ewens, former resident, Monohasset Mill Ronald Florence, resident, Monohasset Mill Julia Gold, resident, Monohasset Mill; author, Principles of Brownfield Remediation: former employee Heather Gaydos, Director of Youth Programs, Institute for the Study and Practice of Non-Violence Kari Lang, Executive Director, West Broadway Neighborhood Association Ray Perreault, Groundwork Providence Sol Rodriguez, Executive Director, OpenDoors Bryan Principe, Councilperson, Ward 13, City of Providence Frank Shea, Executive Director, Olneyville Housing Corporation John Jacobson, Founder, JTJ Investments Ken Conde, Owner, Industrial Welders Supply; corporate sponsor Louis Gitlin, President, Mid City Steel; corporate sponsor Craig Pickell, President, Bullard Abrasives; corporate sponsor Ed Rondeau, Artist and shop user at The Steel Yard Nick Scappaticci, Founder, Tellart; The Steel Yard tenant

#### **REFERENCES\*\***

#### "Brownfields Success in New England: The Steel Yard," United States Environmental Protection Agency Online, August 2011, http://www.epa.gov/region1/brownfields/success/11/SteelYard.pdf

Cameron, Kristi. 2011. "Rising from the Ashes," Metropolis Magazine Online, January 17, 2011. http://www.metropolismag.com/story/20110117/ community-activists-rising-from-the-ashes

Campbell, Paul. "A Brief History of Providence City Hall," City of Providence, Rhode Island Online, http://www.providenceri.com/archives/history

#### "Engineering Controls on Brownfield Containment Guide: How They Work with Institutional Controls; the Most Common Types Used; and an Introduction to Costs,"

United States Environmental Protection Agency Online, November 2010, http://epa.gov/brownfields/tools/ec\_information\_guide.pdf Hollander, J., Kirkwood, N., & Gold, J., Principles of Brownfield Regeneration: Cleanup, Design, and Reuse of Derelict Land. Washington, D.C.: Island Press, 2010

Providence Steel and Iron Company National Register of Historic Places nomination form

"Providence "I am Inspired" final 1," You Tube Video, Posted by "Ben Gillbarg," January 12, 2013, http://www.youtube.com/watch?v=3L8Rd6\_04yA

"The Silver Boom: Life at Gorham & Providence Steel and Iron," Rhode Island Public Radio Online, March 13, 2013, http://ripr.org/post/silver-boom-life-gorham-providence-steel-and-iron

"The Steel Yard, former Providence Steel and Iron," Rhode Island Art in Ruins Online, http://www.artinruins.com/arch/?id=redevelop&pr=steelyard

The Steel Yard, Providence, RI, Honor Award – 2011 ASLA Professional Awards, American Society of Landscape Architects Online, http://www.asla.org/2011awards/183.html

The Steel Yard Online, http://www.thesteelyard.org

The Steel Yard Photostream, Flickr Online, http://www.flickr.com/photos/thesteelyard/

The Steel Yard project sheet, Morris Beacon Design Online, http://www.morrisbeacon.com/media/portfolio-projects/implementation/ steel-yard/steelyard.pdf

Souza, Michael. "Four R.I. Conservation Projects Honored," Providence Business News Online, April 24, 2012, http://www.thesteelyard.org/documents/chafee-award-april-pbn-pdf.pdf

# **ENDNOTES**

<sup>1</sup> The Providence Plan (http://local.provplan.org/profiles/oln\_main.html)