INDUSTRIAL SITES

Infill Philadelphia

How innovative design can leverage one of our city's greatest legacies.

AN INITIATIVE OF THE **COMMUNITY DESIGN COLLABORATIVE**

IN PARTNERSHIP WITH THE **PHILADELPHIA INDUSTRIAL DEVELOPMENT CORPORATION**

LETTER FROM
THE HONORABLE MAYOR MICHAEL A. NUTTER

People coming together to consider new ways to make our city more livable, vibrant and sustainable. Professionals in diverse fields, public officials and neighborhood leaders collaborating and brainstorming about how they can reinvent or revitalize some of our city's oldest and most valuable assets that can help to recharge our economy and create new jobs. This is exactly the type of thinking and collaboration that we need in Philadelphia.

The Community Design Collaborative's most recent **Infill Philadelphia** initiative—focusing on reusing some of our city's former industrial sites—also shows that Philadelphians are actually much more optimistic than the glass-half-empty reputation we used to have. The results of this initiative are examples of glass-half-full thinking. And they're not just ideas—but tangible blueprints that could be used to move ideas to real projects.

We all know that industry is a big part of Philadelphia's past and present. Our neighborhoods and waterfronts have a rich stock of factories, warehouses and workshops dating from the 19th century when Philadelphia was known as the "Workshop of the World."

While Philadelphia may never be the "workshop of the world" again, industry remains Philadelphia's third-largest economic sector, after education and health care, and is a key factor in the city's economic resiliency. One out of every five jobs in Philadelphia is still in the industrial sector.

We are pleased that the Community Design Collaborative and the Philadelphia Industrial Development Corporation (PIDC) partnered to bring the issue of industrial site reuse to life by engaging some innovative designers and planners to show us what that could look like. *Infill Philadelphia: Industrial Sites* is a perfect companion to the Industrial Market Land Use Strategy, conducted by PIDC, with the Philadelphia City Planning Commission and City of Philadelphia Commerce Department serving in an advisory capacity. The Collaborative's work also dovetails nicely with the City Planning Commission's *Philadelphia2035: The Comprehensive Plan* and the important reform efforts of the Zoning Code Commission.

I praise the many individuals, supporters like the William Penn Foundation, PIDC and especially the Community Design Collaborative for developing a forum that provided the resources and thoughtful, thorough process to bring forward exciting, innovative ideas and concepts. This process helped to increase the visibility and possibilities of industry-to-industry reuse and the ideas support a number of the City's goals—goals that rely on job creation, innovation, sustainability, and neighborhood revitalization.

Thanks to the many people who were involved in unveiling such innovative ideas that show the City of Philadelphia's potential to become a leader in industrial revitalization and sustainability.

Michael A. Nutter
Mayor of the City of Philadelphia

EXECUTIVE SUMMARY

Infill Philadelphia: Industrial Sites

explored the possibilities and realities of reusing former factories and underutilized manufacturing sites in an effort to offer more options for small-scale artisans and advanced manufacturing to contribute to a diverse, resilient Philadelphia economy. Infill Philadelphia: Industrial Sites—which, as the process outlined below indicates, included a charrette, an exhibition, and a design challenge—demonstrated the link between industrial reuse and a sustainable city and identified some key design and development guidelines for the next generation of neighborhood-based manufacturing. The designs featured here reveal six guiding principles for the reuse of older industrial sites.

THE PROCESS

- OCT09 — Industrial Sites Interim Reuse Charrette
- NOV09
- DEC09
- JAN10 — Volunteer Teams Visit Sites
- FEB10 — Retooling Industrial Sites Exhibition
- Design Challenge Kick-off Event
- MAR10
- APR10 — Design Review by Jury
- MAY10 — Public Presentation of Final Concepts
- JUN10
- JUL10 — Project Report Release
- AUG10
- SEP10
- OCT10 — Publication Launch and Exhibition

- **Plan for mixed use.** The design concepts developed envision multiple uses, all anchored to an industrial core. Commercial-industrial and residential-industrial mixed use developments encourage or advance such complementary functions as manufacturing with research and development or artisan studios with retail.
- **Create access and connectivity to communities.** Incorporating public space and shared amenities into industrial sites will promote interaction between fabricators and surrounding residents, introduce new audiences to technology, and facilitate a mix of spaces and uses that make a graceful transition between residential blocks and industrial sites.
- **Embrace the urban and the industrial.** A segment of the emerging market for industrial real estate will be looking for compelling, authentic workplaces and the advantages of a city location. Industrial heritage can help to shape a project that incorporates physical remnants and artifacts into the design and restoration of Philadelphia's tradition of in-neighborhood fabrication.
- **Capitalize on locational and parcel size advantages.** In older cities, industrial sites are part of the neighborhood fabric. Their footprints are large relative to adjacent residential blocks and retail corridors, granting them unique development opportunities and the capacity to enhance the competitiveness of the immediate neighborhood.
- **Retrofit with function and flow in mind.** Even the most unconventional industrial start-up has practical considerations: good circulation, well-functioning workspaces, and room to grow. Ease of loading and delivery, right-sized workspaces, and the potential to expand on-site are practical concerns that must be considered in designing for industry.
- **Consider urban ecology.** The designers' charge was to develop sites that encourage the new cleaner, quieter, and greener industries and attract their workforces with landscapes that restore and reconnect the city's ecosystems.

These guidelines focus on physical design, but policy and financing considerations are equally important for the optimal reuse of industrial sites. Comprehensive planning, zoning reform, coordinated marketing, innovative funding, and progressive developers must also be part of the formula to evolve industrial sites in older cities like Philadelphia.

The designs brought to life through this initiative highlight the possibilities. The concepts are as inventive as they are practical, with each uniquely responding to the question that launched this design challenge: "Can innovative design leverage one of the city's greatest legacies?" Each of the three design concepts clearly says, "Yes, it most certainly can."

AMERICANSTREET

NEIGHBORHOOD FABRIC(ATION)

The Charge:

Reposition a partially vacant industrial site as a neighborhood anchor.

infillphiladelphia.org

"A garage creates a work space. A collection of garages creates a community."

Scott Ritchie, SMP Architects

2610-22 North American Street
Lower North Philadelphia • Philadelphia, PA 19133

William Proud Masonry Restoration Company, Inc.
Hispanic Association of Contractors & Enterprises
SMP Architects

THE SITE

American Street has been an industrial corridor throughout its history. This super-wide street, originally built to accommodate carts, trucks, and rail, was and is still lined with factories and warehouses, many of which are now vacant. Philadelphia's typical neighborhood fabric of two- and three-story rowhouses borders American Street's big factory blocks, without any transition between these disparate urban elements.

The project site consists of a three-quarter-acre industrial lot that is only partially used by its owner, William Proud Masonry Restoration Company. Along with its offices and equipment storage, William Proud Masonry maintains a collection of brick, stone, and marble salvaged from historic buildings. One wing of the company's complex—a narrow, four-story structure—remains mostly empty and over half of the property is vacant land. A seldom-used City of Philadelphia parking lot is located across 3rd Street.

William Proud Masonry wants to see its underutilized property put into full, productive use. Any new development must act as a bridge between industrial-sized American Street and the adjacent rowhouse neighborhood.

THE SOLUTION

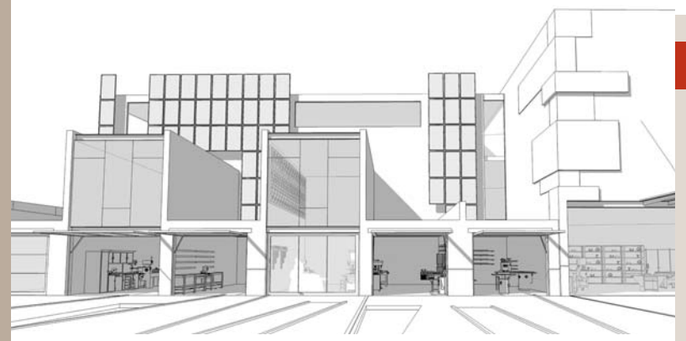
The design team envisions a development that creates a place for amateur and professional fabricators to share space and resources. To be built in phases, this mixed-use project progressively brings its artisan tenants and neighbors together.

The incubator garage—or "micro-factory"—serves as the building block of the project. Partially inspired by the Palo Alto garage that launched Hewlett Packard in 1939, the design team begins with the standard 500-square-foot garage unit as a resource for small Philadelphia-based entrepreneurs, inventors, and fabricators who lack workspace options in a city of rowhouses.

In the project's first phase, a series of garages are built along the north side of the site. Each is equipped with an oversized garage door that can be completely opened, putting fabricators and their work on public view. The design calls for additional garage units that can be stacked on top of the original set as demand grows.

The second phase of construction brings more fabricators onto the site. Garages can be added opposite the first set to form a courtyard. The small floor plates in the vacant factory wing would be outfitted to house studios for small designer-fabricators (metalworking, woodworking, textiles) and a retail space on the ground floor. A tech shop stocked with traditional tools, as well as rapid prototyping and computer-controlled machining devices, offers access to tools and training to a membership drawn from the site's tenants, surrounding neighborhood, and potentially the larger city.

In later phases, the courtyard is developed into a "materials garden" for William Proud Masonry's stock of salvaged masonry and other architectural items. Ultimately, as the community component gains traction, the city-owned parking lot would be redeveloped as a neighborhood café, a commercial incubator kitchen, a community garden, and an urban orchard.

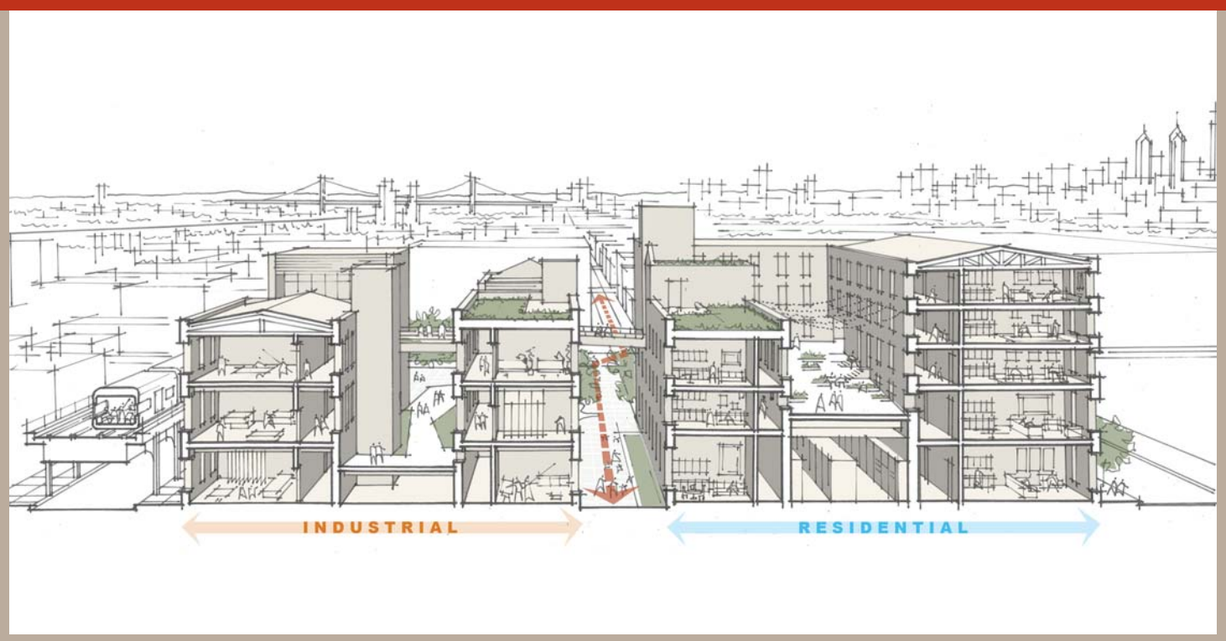


DESIGN STRATEGIES

- Build incrementally to let enterprise grow organically.
- Create opportunities for the community to learn, observe, and fabricate.
- Bridge the gap between industrial and residential scale through transitional uses and spaces.

OXFORDSTREET

MIXED-USE INDUSTRIAL



The Charge:

Create an industrial/residential mixed-use community.

infillphiladelphia.org

"Housing and manufacturing do not have to be diametrically opposed; they can have a real synergy."

Steve Jurash, Urban Industry Initiative

100-10 Oxford Street
Kensington • Philadelphia, PA 19122

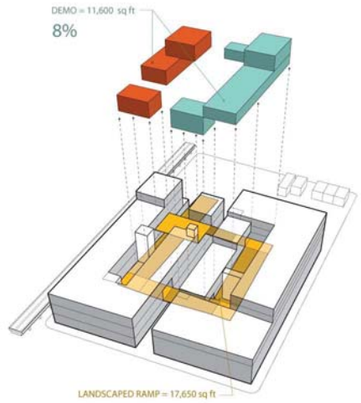
Greenpoint Manufacturing Design Center
Women's Community Revitalization Project
Kensington South Neighborhood Advisory Council
DIGSAU

THE SITE

100 Oxford Street is a densely developed factory complex located within a seam of old factories, workshops, and garages that runs through Kensington. Most recently home to Pieri Creations, a manufacturer of lamps and light fixtures, it now sits vacant. The site is bisected by Hope Street, a gritty but picturesque alley that is occasionally used as a movie set. The eastern edge of the site abuts the Market-Frankford Elevated Line.

The project site's six disparate buildings are clustered together, appearing as two similar-sized structures. Each of the six buildings has separate masonry walls and elevations and floors do not align. Some have gorgeous facades, while others are patched and damaged. The buildings also have different levels of daylighting, with two particularly challenged for natural light.

There is a vacant, paved lot behind the buildings in the southeast quadrant of the site. The site lacks any green space to shield it from the noise of passing subway cars, which can reach 100 decibels.



THE SOLUTION

As the City of Philadelphia takes steps to open up opportunities for mixed-use industrial development, the design team was challenged to redevelop 100-110 Oxford Street as affordable housing and artisan workspace. The team places the industrial component of the project—forty-five studios for artisans—in the U-shaped structure to the east, closest to the El. Thirty-four units of rental housing, a fresh food market, and a community day care center are located in the quieter, more idiosyncratic half of the complex to the west.

The design team suggests an initial bold stroke to recast the factory complex. Approximately eight percent of the building mass is carved away to create a new, shared core between the two tightly packed existing structures. This selective demolition creates an interior courtyard, gives all building interiors access to natural light, and makes way for an outdoor ramp that spirals up the courtyard, connecting floors and the two sides of the complex.

The ramp acts much like a street. It provides public places to sit, observe, or dine. Engaging views between the industrial and housing zones, plantings based on different ecosystems, and a rainwater collection system that employs the ramp's slope that adds a more fine-grained dimension to the complex.

In the redesign, Hope Street takes a more prominent role as the public entrance into the complex and the pathway to the ramp. The vacant land behind the complex is repurposed as an "industrial garden," with loading and delivery for artisans and, in off-hours, play space for the day care center. Roof terraces in the upper level of the ramp provide a protected garden for residents.

DESIGN STRATEGIES

- Practice selective demolition to simplify and adapt densely developed industrial sites.
- Create an architectural element—the ramp—to mediate between different uses and a diverse set of buildings.
- Use the character of the existing buildings, site, and context to create a progression of views and spatial experiences.

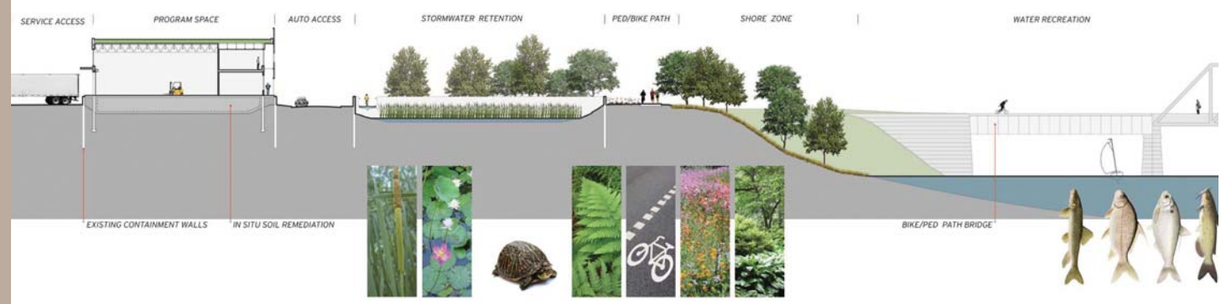
SCHUYLKILLSITE

MAKING CONNECTIONS

The Charge:

Create access and make connections to engage diverse users of industrial land.

infillphiladelphia.org



1600 and 1700 blocks of South 49th Street
Southwest Philadelphia • Philadelphia, PA 19143

Philadelphia Industrial Development Corporation
Southwest Community Development Corporation
University of Sciences in Philadelphia
Charles Loomis Chariss McAfee Architects

THE SITE

With its proximity to highly regarded universities and medical centers, this seventeen-acre site has potential as flex space for advanced manufacturing. The site lies within the paths of active rail lines, the Schuylkill River, three bridges, and historic Bartram's Garden.

Despite all this peripheral activity, the project site remains isolated, due primarily to its position in one of Philadelphia's first heavy industrial districts. The river banks, the topography, and the soil bear the scars of its past use as a railroad roundhouse, an oil-tank farm, and a waste reduction plant.

Gray's Ferry Bridge passes high over this segment of the riverfront, a rail right-of-way blocks access from adjacent neighborhoods, and the swing bridge that once connected the site to the Schuylkill's east bank has long ceased operation. An indirect neighborhood route leads to the site's current sole access point at 51st Street.

"The ecosystems of the site are one of its strongest assets and can be used to leverage some of the occupation of the new development."

Mark Alan Hughes, PennDesign

THE SOLUTION

This dormant industrial site is reconsidered as the city supports clean manufacturing and reembraces the lower, tidal Schuylkill River. With input from Jonathan Alderson Landscape Architects, the design team suggests a site plan for a new eco-industrial park that complements its setting and makes soil remediation and stormwater management an intrinsic part of the redesign.

In the design the land is terraced towards the river to create several distinct zones. An upper plateau is the location for 168,500 square feet of flex industrial space that offers park, river and city views. Existing containment walls isolate areas for the capture of stormwater runoff or form a plinth for new buildings that allow for the remediation of contaminated soils *in situ*. Between buildings and river runs a landscaped buffer for further remediation and trail passage. A modified shore zone with native plantings follows the steeper slope of the river bank, from the reactivated steel pedestrian/bike bridge, to the repaired docks, to the new boat launch that draws people out onto the river itself.

The site is woven back into the city, into the neighborhoods, and into the river. Two new street entrances at 49th Street and 51st Street draw in vehicular and service traffic. A new access tower from Gray's Ferry Avenue Bridge above draws in pedestrians and cyclists from the western neighborhoods. Public transportation brings people in from further locations. At a larger scale, the site connects to the region through CSX rail lines and the East Coast Greenway.

This proposed model for development shows a definite bias towards urban living and working. It is purposefully designed to attract both entrepreneurs who want to leverage the unparalleled medical research assets just a few hundred feet away and recreational users who appreciate the immediacy of the natural environment.

DESIGN STRATEGIES

- Merge industrial use and public space by recognizing, utilizing, remediating and enhancing the environment.
- Maintain and repurpose selected remnants of the industrial past and introduce new sustainable buildings.
- Strategically layer the site to naturally separate and intentionally integrate coexisting functions.

RETOOLING INDUSTRIAL SITES EXHIBITION

FEBRUARY 2010

50 Designs for Transforming Industrial Sites

Retooling Industrial Sites reflected a growing national interest in revitalizing industrial sites and urban manufacturing and illustrated the role that design can play in reintegrating older industrial sites back into the urban landscape and the American consciousness.

The array of projects presented by thirty firms from the Mid Atlantic region—built and unbuilt, large-scale and small-scale, adaptive reuse and industry-to-industry reuse—demonstrate the diverse ways in which industrial sites are being addressed and reconsidered.

A panel of Urban Land Institute District Council members reviewed the projects and identified six promising models (pictured on the facing page) that merit further investigation.

View an online gallery of the projects at infillphiladelphia.org.

URBAN LAND INSTITUTE DISTRICT COUNCIL REVIEW PANEL

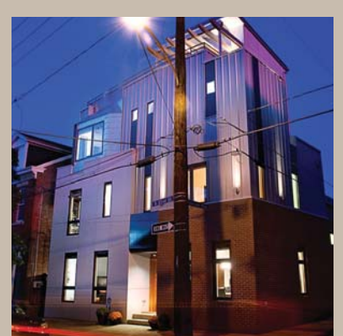
Craig Schelter

Michael Sklaroff, Esq.

Rose Gray

Richard Huffman, FAIA

Barry Seymour, AICP



The Wharf at Rivertown CHESTER, PA
Blackney Hayes Architects

A monumental 20th-century power plant redeveloped as a multi-tenant office building.

Icehouse Residences PHILADELPHIA, PA
Continuum Architecture and Design

Thirteen residential units located above a former automotive repair garage with a green roof for resident use.

Milk Depot Housing PHILADELPHIA, PA
COVER LLC

Harbison's Dairy complex retrofitted for apartments in transformational Lower Kensington.

Mercy Family Center PHILADELPHIA, PA
Brawer & Hauptman Architects

A community center for residents of the Tioga-Nicetown community in North Philadelphia housed in a former warehouse.

Not Garden PHILADELPHIA, PA
PEG Office of Landscape + Architecture

Experimental cleaning and greening strategy for vacant properties utilizing laser-cut weed control fabric.

Wakisha Charter School PHILADELPHIA, PA
UCI Architects, Inc.

The new home for 400 sixth-through-eighth graders in a former industrial laundry facility.

INDUSTRIAL SITES INTERIM REUSE **CHARRETTE**

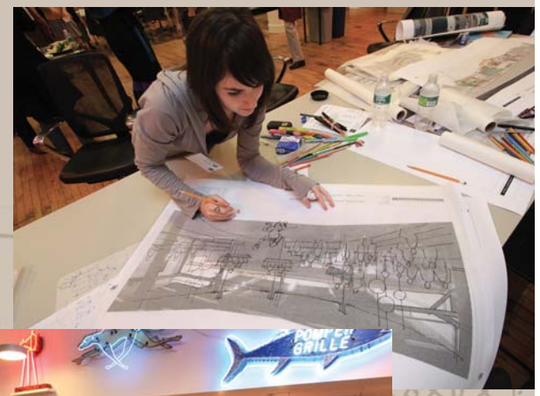
OCTOBER 30, 2009

4 Sites | 2 Neighborhoods | 1 Day of Design

The Community Design Collaborative hosted the Industrial Sites Interim Use Charrette to explore ways to reanimate vacant neighborhood-based industrial sites through creative temporary installations.

Four teams of designers—including architects, landscape architects, planners, and public artists—were charged with designing temporary uses for vacant industrial sites selected by the Philadelphia Chinatown Development Corporation and the New Kensington Community Development Corporation.

More than 100 charrette participants produced concepts for enlivening overlooked and neglected industrial lots, buildings, and infrastructure. They proposed temporary uses that included public art installations, performance spaces, an outdoor markets, and a rooftop urban campsite for stargazing.



PARTNERS

AIA Philadelphia Urban Design Committee

Community Design Collaborative

Philadelphia Association of Community Development Corporations

KICK-OFF SPEAKER

David Belt, Macro-Sea

VOLUNTEER TEAM

KSK Architects Planners Historians, Inc.

GLASSPHEMY!

Inspired by a conversation at the charrette about broken glass in empty lots, **David Belt** of **Macro-Sea** and his team of creative designers, constructed **Glassphemy!**, a 20 x 30–foot interactive glass recycling center.

ABOUT **INFILL PHILADELPHIA**

Infill development sites are best characterized as neglected public spaces and clusters of vacant or nearly empty buildings and land. Over time, these sites can obstruct community development plans and even threaten neighborhood stability and growth.

Infill Philadelphia was created by the Community Design Collaborative to help urban communities reenvision their neighborhoods, leverage existing assets, rethink the use of older spaces, and address the practical concerns of specific sites and the communities around them.

Launched in January 2007, Infill Philadelphia uses a design-centered approach that hinges on collaboration and promotes innovation, from start to finish. Guiding the approach is an intensive, interactive design challenge in which volunteer design firms work simultaneously to develop conceptual ideas for three sites selected by community-based organizations.

The initiative brings together design practitioners, community development experts, policymakers, funders, and the media to address urban infill development—a significant neighborhood revitalization strategy for Philadelphia and older American cities.

This unique initiative is being implemented in three phases, each addressing a specific infill development opportunity. The first phase of Infill Philadelphia focused on neighborhood commercial corridors, essential centers of urban life. Food access, a significant factor in community and economic health in urban neighborhoods, was selected as the initiative's second topic. The third phase of Infill Philadelphia explored reuse of older industrial sites for a new generation of urban industry.

GOALS:

- **Generate workable solutions** for under utilized space in Philadelphia neighborhoods.
- **Promote systems change** by developing exciting ideas that will help Philadelphia's leaders rethink the future of city neighborhoods.
- **Foster an understanding of the value of good design** among community leaders and developers.

THE COMMUNITY DESIGN COLLABORATIVE GRATEFULLY ACKNOWLEDGES THE FOLLOWING INDIVIDUALS AND ORGANIZATIONS FOR THEIR GENEROUS CONTRIBUTIONS TO THE DESIGN CHALLENGE:

PROJECTS AND PARTICIPANTS

AMERICAN STREET: NEIGHBORHOOD FABRIC(ATION)
William Proud Masonry Restoration Company, Inc.
Hispanic Association of Contractors & Enterprises
SMP Architects

OXFORD STREET: MIXED-USE INDUSTRIAL
Greenpoint Manufacturing and Design Center
Women's Community Revitalization Project
Kensington South Neighborhood Advisory Council
DIGSAU

SCHUYLKILL SITE: MAKING CONNECTIONS
Philadelphia Industrial Development Corporation
Southwest Community Development Corporation
University of the Sciences in Philadelphia
Charles Loomis Chariss McAfee Architects

JURORS

Daryn Edwards, Interface Studio Architects, LLC
John Grady, Philadelphia Industrial Development Corporation
Alex Haecker, Meyer Scherer & Rockcastle Ltd
Joseph Houldin, Delaware Valley Industrial Resource Center
Mark Alan Hughes, PennDesign and TC Chan Center for Building Simulation and Energy Studies
Steve Jurash, Urban Industry Initiative and Manufacturing Alliance of Philadelphia
Scott Page, Interface Studio
Matt Papajohn, Pappajohn Woodworking
Jaime Salm, MIO
Laura Wolf-Powers, PennDesign

Moderator: Paul Sehnert, University of Pennsylvania and Community Design Collaborative Board of Directors

RESOURCE ADVISORS

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John Gallery, Preservation Alliance of Greater Philadelphia
Adam Glaser, AIA, LEED AP, WRT
Brian Kuhns, Kramer/Marks Architects
Jeremy Philo, Kramer/Marks Architects

SPEAKERS

C. William "Bill" Struever, Partner, CEO and President, Struever Bros., Eccles and Rouse
John Grady, Executive Vice President, Philadelphia Industrial Development Corporation
Eva Gladstein, Executive Director, Philadelphia Zoning Code Commission
Nina Rappaport, Publications Director, Yale School of Architecture Books

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215.587.9290

Infill Philadelphia

COMMUNITY DESIGN COLLABORATIVE

Community Design Collaborative is a community design center that provides *pro bono* predevelopment design services to nonprofit organizations, offers unique volunteer opportunities for design professionals, and raises awareness about the importance of design in community revitalization. Founded in 1991, the Collaborative is an independent nonprofit with a network of more than 1,000 volunteers.

cdesignc.org

PIDC

Philadelphia Industrial Development Corporation (PIDC) is a private, not-for-profit Pennsylvania corporation founded in 1958 by the City of Philadelphia and the Greater Philadelphia Chamber of Commerce to promote economic development throughout the city. PIDC's central strategy is to leverage financing and real estate resources to retain and grow employment in Philadelphia.

pidc-pa.org

2010