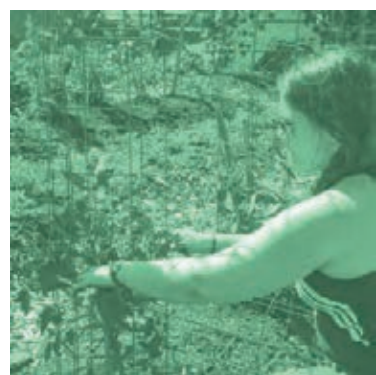


PEORIA FOOD HUB: CASE STUDY REPORT & DESIGN PROPOSAL

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Associate Professor Lynne Dearborn, Ph.D.

**THE ILLINOIS SCHOOL OF
ARCHITECTURE**
COLLEGE OF FINE + APPLIED ARTS | UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



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1411 SW Adams St, Peoria, IL

Executive Summary

The goal of this planning study is to comprehend, summarize, and catalyze the City of Peoria's growing interest in improving their local food system, specifically within the South Side neighborhood, through economic strategies targeted at supporting a healthy community.

Produced by University of Illinois School of Architecture graduate students Michael Osterloo and Drew Nuding, and overseen by Professor Lynne Dearborn, this project builds on work completed in the Spring 2016 graduate design studio: Realizing a Healthy "Heart of Peoria," ARCH572. Our research suggests the importance to public health of enhancing the built environment's relationship with South Side Neighborhood residents through the growth of an urban farming community. A system of supports across the stages of urban farming production will enable vibrant agricultural economic development through education, training, and marketing assistance while simultaneously building on three of the South Side Neighborhood's greatest assets: vacant land, under-utilized property, and human resources.

The initial chapter of this report consists of case study analyses of multiple facilities in the Midwest region to investigate the variety of business models and programming requirements seen in the industries of small-scale urban farming, commissary kitchens, and agricultural incubators. The second phase of this study explores renovation opportunities of existing structures in Peoria and proposes a phased conceptual design solution that accommodates the programmatic goals of a facility for agricultural business incubation.

This agricultural incubation service primarily aims to enhance social interaction within the local community and to help build social capital that will contribute to successful small business development and economic well-being among residents. As noted in, "The Gifts in the Moment Foundation's Fresh Food Hub Comprehensive Economic Development Strategy," the core objectives of this service are to:

- Improve the technical agricultural skills of the urban beginning farmer through seasoned farmer peer mentoring
- Increase the marketability of the small growers through improved marketing skills, business development specifically targeting the disadvantaged and small growers with year around profit planning
- Expand markets (Community Supported Agriculture, farmer's markets, and wholesale) for beginning urban growers
- Increase financial viability through value added product line development for small family and urban growers with availability of a licensed commissary kitchen
- Improve the livability of the community through green infrastructure and through reduced crime in areas adjacent to agricultural centers.

The conceptual design included here, uses one of several possible underutilized properties proximate to the South Side Neighborhood. The George O. Pasquel complex of buildings is particularly well suited to the long-term program of activities and services for a variety of reasons. It sits on the border of the South Side neighborhood and the Warehouse District along Adams Street's newly developed green infrastructure, offering an excellent opportunity for the food hub to create and attract foot and bike traffic from South Side homes towards new development along the river.

Another advantage of the site is that it is operated by Peoria's longest-running institutional food and equipment distributor. Since the company's inception in 1946, four generations of the Pasquel Family have continued to contribute historic and cultural value to Peoria's food industry. Their ideas about Peoria's future food system directly align with the current discussions in the City. They also have great interest in participating in a cooperative food-hub venture. The combination of the company's established reputation with Peoria natives and the spacious plot of land it occupies gives it the ability to generate an experiential quality for visitors that can inspire the evolution of a community landmark.

Lastly, the existing white brick structure of 1411 SW Adams has retained a surprisingly high level of structural and architectural value since its construction. The expansive layout, soaring ceiling volumes, exterior courtyards and areas of hardwood flooring are just some of the qualities that boost this building's potential to become both a food hub and a neighborhood icon. It is our hope that over the longer-term the study and conceptual proposal included here will prove useful as a catalyst for an urban food hub in Peoria, Illinois.

PortFish, Ltd

Urban Agriculture







Port Washington, WI

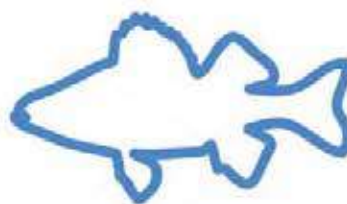
portfish.org

Non-profit: 501(c)3

Mission:

"To create a working aquaponics model and year-round food production system that can be replicated to promote and engage communities in local, sustainable food production."

A small-scale aquaponics farm, PortFish, Ltd. influences the local community of Port Washington, Wisconsin by teaching sustainability. Mainly using the growing systems of aquaponics and hydroponics, Portfish produces a salad blend that is sold through a CSA, and also a wholesale product called PortFish Signature Salad Blend. PortFish happily gives free tours at any time because they are always interested in spreading knowledge about their enterprise that operates in a once-abandoned structure just outside of Port Washington. Education about sustainable and healthy alternatives to industrial-scale food production and supply are the keys to encouraging a local community to change the way they go about buying food for their families.



YELLOW PERCH
HARVESTED PER YEAR



POUNDS OF SALAD BLEND
HARVESTED PER DAY



GREENHOUSE



PERCH TANKS



BEGINNING PLANTS



MATURING PLANTS

|| PortFish, Ltd is a nonprofit organization formed to address, and raise awareness about, issues and concerns regarding our current and future food supply. **||**

Staff

Two Owners
Four Harvesters
Two Gardeners
One Accountant
Volunteers

Contact Information

Phone
(262) 284-1970
Email
info@portfish.org
Address
3781 County Road KW,
Port Washington, WI
53074



PAT WILBORN

Portfish Day

Annual event for Port Washington community to sell and fry harvested perch from PortFish aquaponics system. World's largest one-day outdoor fish fry.

CSA's

10 weeks of ½ lb PortFish Signature Salad Blend = \$70

10 weeks of ½ lb PortFish Signature Salad Blend + 1 dozen eggs = \$105

Wholesale

Sell fresh greens at summer farmers markets and at Port Washington's "Winter Farmer's Market". PortFish Signature Blend sold to local restaurants, grocery stores and coffee shops.

The facility is a 4,400 sq. ft. former agricultural storage building that was once the Port Feed Grain business. The building is a timber-frame structure measuring 28' x 94' with divided into seven 13' wide bins formerly used for ag. storage. Currently, four of the seven bins have been completely remodeled and are used for the fish habitat, nitrification filter and plant propagation portions of the process. Renovation costs primarily consisted of replacing the roof. The Wilborn's purchased a greenhouse kit for under \$15,000, and eventually unfolded the greenhouse and secured it along the southern face of the long building.

FUNDING

Private investment by owner

Sales from CSA

Wholesale

Annual fish fry

SPONSORS

School of Fresh Water Science at University of Wisconsin provides the yellow perch



OUR THOUGHTS:

PortFish is located in the wealthiest county of Wisconsin. However, this major difference does not limit the relevance of its the business model for Peoria, Illinois. The facility and systems utilized by PortFish are designed in a way that enables adaptation to other locations. A creative remodel for an aged agricultural storage building, turned an unused storage structure into a sustainable farming facility. If funding was available, the owner would make the facility completely sustainable by installing solar panels to offset electricity used on the HVAC system. The owner has proven that with a small space and a small staff, change can still be made in a community. As word continues to spread about local food growth, the demand will continue to increase for the PortFish signature salad blend.

Growing Power

Urban Agriculture







GROWING POWER INC.

Will Allen, a farmer and former professional basketball player, created Growing Power in 1993 as a program for teens to work at his farm to grow and sell food for the local community. Allen started the partnership hoping to help community residents but it turned into a national and global commitment to sustainable food systems. He bought the last piece of agriculture-zoned land in the city of Milwaukee where he renovated 100-year old greenhouses. Since its inception, Growing Power has served as a "living museum" or "idea factory" for the young, the elderly, farmers, producers, and other professionals ranging from USDA personnel to urban planners. The range of programs and learning opportunities within Growing Power is extensive, including: acid digestion, anaerobic digestion for food waste, bio-phytoremediation and soil health, aquaculture closed-loop systems, vermiculture, small and large scale composting, urban agriculture, permaculture, food distribution, marketing, value-added product development, youth education, community engagement, participatory leadership development, and project planning.



LOBBY



HOOP HOUSE



GREENHOUSE



LIVESTOCK

Milwaukee, WI

growingpower.org

Non-profit: 501(c)3

Mission:

"Supporting people from diverse backgrounds, and the environments in which they live, by helping to provide equal access to healthy, high-quality, safe and affordable food for people in all communities."

1M

POUNDS OF FRESH MICRO-GREENS,
FRUITS AND VEGETABLES PRODUCED
EVERY YEAR

10M

POUNDS OF LOCAL WASTE
COMPOSTED PER YEAR

1000

POUNDS OF WASTE REDUCED
FROM ENTERING LANDFILLS BY
EVERY ONE YARD OF COMPOST
PURCHASED FROM GROWING
POWER

2500

DOLLARS SAVED EVERY YEAR
THANKS TO 30 SOLAR PANELS

|| Since its inception, Growing Power has served as a "living museum" or "idea factory" for the young, the elderly, farmers, producers, and other professionals ranging from USDA personnel to urban planners. ||

Staff

Production Sales

Department

Accounting Department

Farmers

Interns

Contact Information

Phone

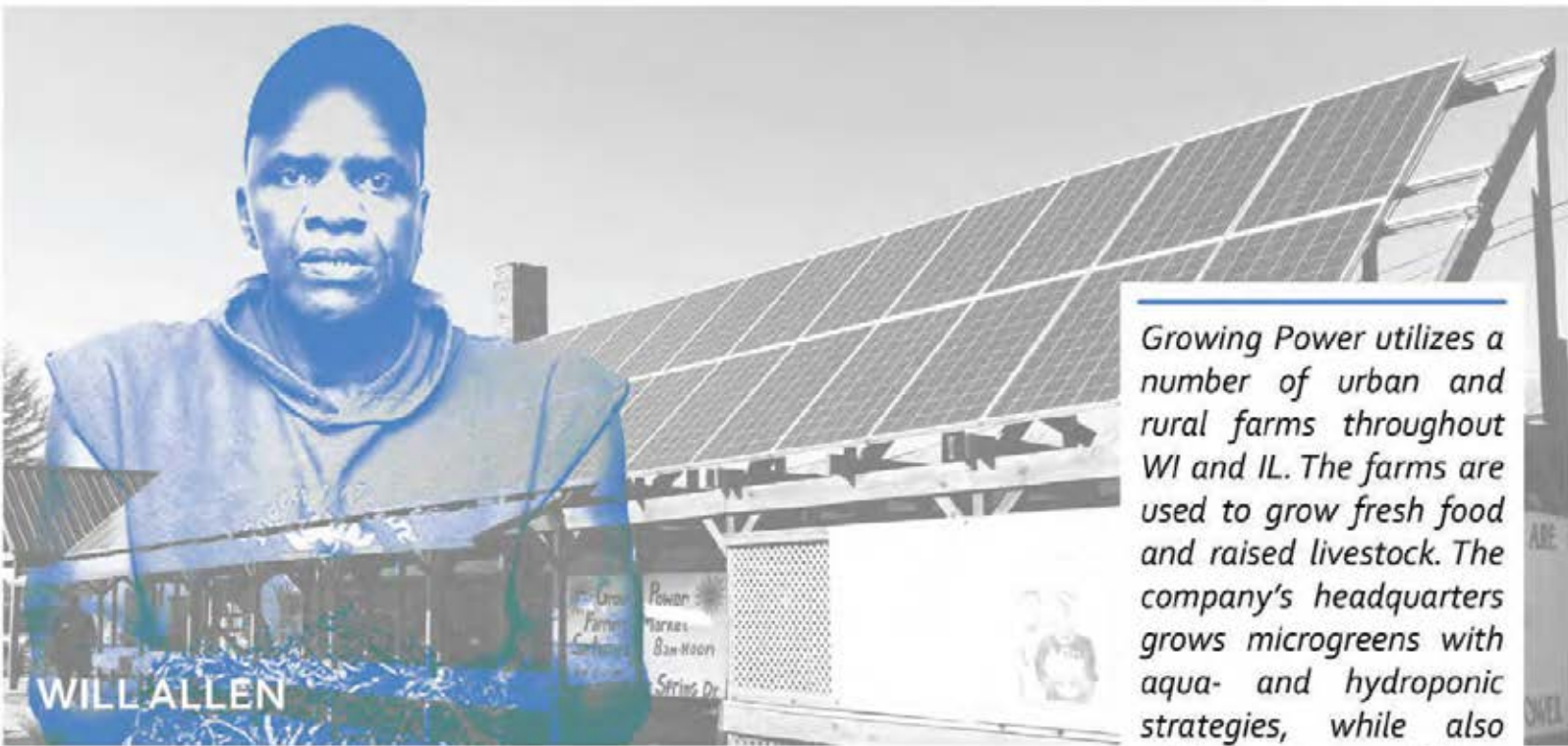
(414) 527-1546

Email

staff@growingpower.org

Address

5500 W Silver Spring
Drive
Milwaukee, WI 53218



Growing Power utilizes a number of urban and rural farms throughout WI and IL. The farms are used to grow fresh food and raised livestock. The company's headquarters grows microgreens with aqua- and hydroponic strategies, while also raising goats, chickens and bees. Growing Power produces soil through the immense amount of vermicomposting done on site. The fresh food is sold at the farm's store as well as through CSA's.



Requirements

3-month commitment with the expectation that interns work 6 days per week, averaging 60 hours of work in a dynamic work environment. Tasks change daily due to weather, task priority, and farm needs.

Stipend and Benefits

\$100 per week, paid bi-weekly room and board, security deposit required Laundry access Farm-to-City Market Basket each week



"From the Ground Up"

Two-day gardening workshop



Aquaponics Workshops

Three-day training



Winter Farmers Market

Every Saturday beginning in November 8am-noon

FUNDING

Facility Tours (\$10/person)

Donations

Soil sales

Worm sales

On-site produce sales

CSA's ("Farm-to-City Market Basket")

Educational Kits

Workshops

SPONSORS

Barilla
Farm Aid
Kellogg Foundation
Small Planet Fund
USAID
USDA
Walmart Foundation
and many,
many more...

OUR THOUGHTS: Growing Power has made a larger impact than any other urban agriculture food system. They attempt any possible sustainable strategy, from the obvious ones of growing plants in a facility powered by solar panels to raising livestock in the middle of the city. The Growing Power site is unique and well-positioned to be accessible and impactful on the local community. The northern Milwaukee neighborhood where Growing Power resides has many similarities to the south side of Peoria, Illinois (e.g., disinvestment-generated vacant lot abundance, stretches of food deserts). It took great vision, motivation and selflessness for Will Allen to achieve what he has thus far. Peoria stakeholders will need these same characteristics to make a similar impact in the community.

Urban Harvest STL

Urban Agriculture







The first roof garden in St. Louis, Missouri, Urban Harvest STL sits atop a two-story building in downtown St. Louis. Here, this organization grows a variety of produce and holds many outdoor programs. This multifaceted space comprises all the organizations' fresh food growing area as well as the location for community events and educational programs. The space can be rented and visited by the community during suitable weather. Urban Harvest STL believes in the closed-loop local food system and participates in St. Louis's FOOD ACCESS CLUSTER. The city of St. Louis understands that not one organization alone cannot overcome the food desert challenge. By collaborating with other local partners, Urban Harvest STL can have their fresh produce distributed to local citizens.



FOOD ROOF



FARM FLOW YOGA

“We are developing a network of organizations with defined roles to address food insecurity because it's an impossible task for any one organization.**”**

St. Louis, MO

urbanharveststl.org

Non-profit: 501(c)3

Mission:

"Cultivate equitable access to healthy, sustainably grown food and builds community around inclusive and resilient local food systems."

FOOD ROOF Farm

An 8,500 square foot rooftop that is sustainable and functional in multiple ways. 17,000 gallons of stormwater per storm are captured by the roof, 200 varieties of edible plants are grown, a multi-functional community hub space, greenhouse, chicken house, living wall, and hydroponic towers all open for the urban community.

FOOD ACCESS Cluster

- 1) Urban Harvest STL grows organic food
- 2) St. Louis MetroMarket distributes food through farmers markets
- 3) Urban Harvest STL and MetroMarket educate at the FOOD ROOF Farm and cooking demonstrations at farmers markets

1760

HEALTHY MEALS DISTRIBUTED TO FAMILIES THROUGH FARM TO FOOD ALLIANCE

3500

POUNDS OF FOOD GROWN ORGANICALLY ON 3 URBAN FARMS

16

INTERNS EDUCATED ON LEADERSHIP AND URBAN AGRICULTURE

377

GAVE 4,262 HOURS OF SERVICE PROVIDING \$97,251 WORTH OF SERVICES

1.8M

GALLONS OF WATER CAPTURED BY GREEN ROOFS AND MITIGATED FROM STORMWATER RUNOFF



MARY OSTAFI

FUNDING

Donations

Tours & Field Trips

\$50 for <20 people

\$100 for >20 people

Event Space Rental

\$100/hr on weekdays

\$150/hr on weekends

SPONSORS

William A Kerr Foundation

Luxco

DJM Ecological Services

HOK

Bissinger's

Clementine's

St. Louis Compositing

US Bank

Downtown STL

Garden Heights Nursery

New Belgium Brewing

Kaldi's Coffee

Change Inc.

Missouri Foundation for Health



Eating from the Garden

FREE nutrition training through partnership with Missouri University Extension offered for class field trips for grades 1-8.



Flance Garden

Urban Harvest STL partnered with Flance Early Learning Center to build 16 raised garden beds, a picnic area, and composting area on school property to provide an educational platform that also produces directly for the center's cafeteria.



Kerr Food Roof

A converted sedum green roof is now a food roof utilizing hydroponics and 35 modular smart pots. All produce is donated to the McMurphy's Café of the St. Patrick Center.

OUR THOUGHTS: Urban Harvest STL provides a commendable model of coordinating and collaborating with multiple local groups to reach and support the St. Louis community's need for healthy, fresh food. With early planning and an understanding that acting alone would limit their impact, Urban Harvest STL joined efforts with other organizations and programs to increase their reach. Peoria, Illinois enjoys a similar opportunity for its local organizations to collaborate in one coordinating entity in a manner similar to St. Louis. Each organization brings a certain specialty and target market that another organization cannot achieve. This model offers Peoria's community leaders involved in urban agriculture and public health an important precedent to support their altruistic concern for the well-being of their local community and individuals.

Staff

Executive Director

Urban Agriculture Director
Development Coordinator
Community Coordinator

Work Study Urban Famers
from St. Louis University

Contact Information

Phone

(314) 810-6770

Email

admin@urbanharveststl.org

Address

1335 Convention Plaza
St Louis, MO 63103

Prosperity Gardens

Urban Agriculture





PROSPERITY
GARDENS

PROSPERITY GARDENS

Conceived in 2010 to address childhood obesity and lack of nutrition educational programs, Prosperity Gardens (PG) also seeks to provide jobs through the science and production of fresh produce in the Champaign-Urbana area. By partnering with the City, PG's urban gardening takes place on two centrally located city-owned lots and numerous scattered garden sites. The fresh produce is intended for the area's low-income residents, and the garden's location lends itself to service neighborhoods considered food deserts. PG strives to educate youth in a way that enables an economically self-sufficient and healthy life.



READY PROGRAM



FARMERS' MARKET



RENOVATED DELIVERY BUS



GROWING SEASON

Improving the health and well-being of the at-risk youth who participate in the program and the low-income neighborhoods in which Prosperity Gardens operates.

Champaign, IL

prosperitygardens.org

Non-profit: 501(c)3

Mission:

"Through neighborhood farming, Prosperity Gardens is dedicated to cultivating healthy communities by providing education, employment and collaboration opportunities."

READY to Garden

Prosperity Gardens and the Regional Office of Education's READY program partnered together to form a more thorough program than the "Garden Club." This program allows up to 125 students to enroll in a curriculum developed around garden-based agricultural science, healthy lifestyle choices and physical fitness. Many of the students enrolled have unstable living situations where they are faced with crime, gangs and illegal substances in their daily lives.

125

STUDENTS ENROLLED IN THE READY PROGRAM

61%

OF THESE STUDENTS ARE AFRICAN-AMERICAN OR OTHER MINORITIES

90%

QUALIFY FOR FREE OR REDUCED SCHOOL LUNCH PROGRAMS





NICOLE BRIDGES

Garden Club

The first program initiative at Prosperity Gardens was in partnership with the Boys & Girls Club and volunteers. Elementary students are taught the basics of gardening in an effort to teach children the enjoyment of growing produce as well expanding knowledge of healthy foods in a safe location.

“ Create opportunities for job training and career development in the expanding areas of sustainable agriculture, local food production and distribution, and related “green” industries. ”



OUR THOUGHTS: The mission and site selection of Prosperity Gardens are extremely important factors for its success. With a mission focusing on the youth of low-income and food-desert neighborhoods, PG has placed their gardens in the middle of those neighborhoods and opened their doors to all interested individuals. Lessons for Peoria, Illinois grow from location and programming decisions made at Prosperity Garden’s inception. If the goal is to target a specific community or population, the effort must endeavor to locate as geographically proximate as possible to the people with which it hopes work. Not only does this make for a more accessible and convenient location, it also proves to the local neighborhood that the initiative is serious about making a difference there. Healthy children lead to healthy and productive citizens; a mission focusing on children offers a judicious foundation for a health-based organization.

Staff

Lead Program Coordinator

READY Program Coordinator

Contact Information

Phone

(217) 419-2855

Email

info@www.prosperitygardens.org

Address

302 North First Street
Champaign, IL 61820

FUNDING

Donations

Sales at farmers markets

Sales at mobile market

On-site food stand

SPONSORS

United Way of Champaign County,
Carle Foundation Hospital, Presence
Covenant Medical Center, University of
Illinois, Common Ground Co-Op

Recipe for Success

Business Incubator





Recipe for Success

HALO Incubator Kitchen

Racine, WI

halorecipeforsuccess.wordpress.com

Program within Non-profit: 501(c)3

Recipe for Success is a program within the organization of Halo, Inc. Halo has been a homeless shelter in Racine, Wisconsin for 12 years, and Recipe for Success has existed within it for 7 years. The program's business model is centered on renting out their certified kitchen in the homeless shelter, with its income helping to pay for Halo's facility expenses and programs. With few startup costs, it was not difficult to get the program running after establishing a director for the program. This also allows the rental fees to remain low for chefs to begin and solidify their own business.

\$12

PER HOUR FOR SMALL
BUSINESS START-UPS

\$25

PER HOUR FOR LARGER
BUSINESSES OR BUSINESS WITH
OVER 1 YEAR OF EXPERIENCE



HALO HOMELESS SHELTER



REFRIGERATION SPACE



FOOD PREPARATION SPACE

|| Many food entrepreneurs have great ideas and are expert chefs, but have a modest budget. ||

TENANTS

Miss Tea

Olano's Empanadas

Sherwood's Fabulous Fudge

Sugar and Spice Cupcakes

Sweet Something's Pastries (Owned by Rose)

Gray Creations

I Love Tamales

* Can host up to
12 tenants
at a time



ROSE MATTEIS

Empty Bowls

Local restaurants and incubator businesses donate food, schools donate ceramic bowls from art classes, and for \$15 anyone can eat as much as they want and take the bowl home.

Cooking Classes

Recipe for Success holds cooking classes throughout the year, such as the week before Valentine's Day or Thanksgiving to offer a lesson on how to prepare a meal for family or friends. The local Piggly Wiggly donates food, a local chef donates time to teach the class, and all of the food is served to the homeless at Halo.

Business Classes

There are many learning opportunities to start, develop or take a kitchen business to the next level through some of the business classes offered at Recipe for Success in the Halo facility. Lectures on First Steps, Licensing, Labels and Distribution are all topics for business owners to learn about.

FUNDING

Donations suggested from classes

\$10 (suggested donation)

Rental fees

Lecture Series

\$15 per speaker

\$25 for whole event

Staff

Kitchen Director hired by Halo

Kitchen Assistants hired by Halo

OUR THOUGHTS: Recipe for Success is a unique form of a kitchen incubator because of its location within its city as well as its position within its parent organization. Many kitchen incubators are found in wealthy regions of the United States and provide services for food trucks and up-and-coming restaurants. This kitchen incubator differs in that it exists to serve the needs of a low-income region of Racine, Wisconsin by offering low rental fees for the use of a quality kitchen. Recipe for Success has been very resourceful by using an existing kitchen and finding used kitchen appliances at lower costs. Peoria, Illinois can use this idea of resourcefulness by seeking out an existing commercial kitchen in an unused building or within an organization that does not use the kitchen all hours of the day. Two organizations can team together and share profits of rental fees while giving local chefs an opportunity to start their own food business.

Contact Information

Phone

(262) 960-1524

Email

recipeforsuccess@halo-inc.org

Address

2000 DeKoven Ave
Racine, WI 53403

National Foodworks Services

Business Incubator







**National
Foodworks
Services LLC**

A large-scale business created for local business and kitchen entrepreneurs in Decatur, Illinois, and the surrounding central Illinois area, National Foodworks Services (NFS) boasts a 36,000 square-foot manufacturing space fully prepared for numerous food services. They believe they will succeed because of Illinois' Billion Dollar Gateway® demonstrating that Decatur is surrounded by some of the nation's most productive soil and numerous major interstates connecting many large Midwest cities.

Co-located in Decatur, Culinary Arts Institute of Richland Community College partners with NFS for educational purposes. NFS provides services for the creation of food businesses, businesses relating to the processing and packaging of food, and educating food and business entrepreneurs.

|| Decatur, IL is surrounded by thousands of square miles of the richest farm soil in the world. **||**



Decatur, IL

nationalfoodworkservices.com

IL Registered Company

Mission:

"Expand and upgrade processing, packaging and development for food businesses and food entrepreneurs. Along with these services, NFS will also offer an educational component for entrepreneurship. Our world-class facility will be a leading food hub for the Midwest."

100,000,000

CONSUMERS IN 21 STATES ARE
WITHIN 500 MILES OF DECATUR. THAT
IS A ONE DAY TRUCK DRIVE.

22,000,000

CONSUMERS ARE WITHIN
200 MILES OF DECATUR



BAKERYWORX

BakeryWorx is National Foodworks Services first product line, including cookies, brownies and blondies. The baked treats have zero preservatives and are sold in convenience stores, supermarkets, gas stations and many other locations in Illinois.



National
Foodworks
Services LLC



TONY CACCAMO

Business to Business

National Foodworks Services offers services in co-packing, private labeling and shared usage for many different types of food businesses. NFS plans to work with local farmers to expand their opportunities.

Education

Richland Community College has a formal partnership with National Foodworks Services. Richland will offer an accredited program which provides an education on topics such as food manufacturing, packaging, distribution, business development, marketing and finance.

Food Entrepreneurs

NFS assists its clients in different ways, whether sourcing ingredients, providing marketing consulting, financial consulting, or shopping finished products. The NFS facility also provides a space to produce food.

FUNDING

Service fees for business entrepreneurs

Service fees for food entrepreneurs

BakeryWorx product sales

Staff

Marketing Manager

Director of Finance

many other business owners and entrepreneurs serving as consultants or advisors

OUR THOUGHTS: National Foodworks Services comprehensively approaches food hub creation for the entire Midwest. NFS research shows that location alone will help their business be successful. They understand that there are three components to a food hub: business, food production, and education. By providing all of these services, they offer a complete package for any single entrepreneur or business wanting to start or expand their production or sales. Peoria, Illinois' close proximity to NFS and "The Gateway," suggests partnering with NFS or starting a similar service business, could enable the same full-service food hub to support Peoria's existing and future food organizations.

Contact Information

Phone

(217) 330-8512

Email

info@nationalfoodworks.com

Address

575 Brush College Road
Decatur, IL 62521

Plant Chicago

Agricultural Incubator





T

H

E

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P

L

A

N

T



PLANT CHICAGO

"The Plant" is a hyper-innovative, hybrid vertical farm/start-up incubator in Chicago's Back of the Yards district. The Plant's building was repurposed into a collaborative community of over a dozen small, food producing businesses all committed to materials reuse and closed loop systems. Waste products and materials from one business are utilized by another, significantly minimizing landfill-directed waste. Food waste that is not easily reused (including over 10,000 tons per year of food waste from other nearby businesses) feeds into an anaerobic digester. This machine creates biogas that is used to produce both heat and electricity for The Plant's building. Tenants essentially power their operations via their own waste. The overarching goal develops circular economies of food productions, energy conservation and material reuse. Through projects and programs that include hands-on workshops, tours, growing labs and an on-site Farmers' Market, The Plant equips businesses, families and individuals with the tools needed to lead more sustainable lives.



RENOVATED INTERIOR



ON-SITE FARM



ROOFTOP BEE FARM



WALL MURAL

Union Stockyards, Chicago, IL

plantchicago.org

Non-profit: 501(c)3

Mission:

"To develop circular economies of food production, energy conservation and material reuse, while empowering people of all backgrounds to make their cities healthier and more efficient."



TONS OF FOOD WASTE
WILL BE DIVERTED FROM
LANDFILLS BY THE FACILITY



SURROUNDING HOMES WILL
HAVE THEIR ELECTRICITY
PROVIDED BY THE FACILITY



PEOPLE PAY TO TOUR THE
PLANT PER MONTH



SURROUNDING HOMES WILL
HAVE THEIR ELECTRICITY
PROVIDED BY THE FACILITY

"We're working to make our cities healthier and more efficient by developing and sharing the most innovative methods for sustainable food production, energy conservation and material reuse."

TENANTS

FRUITING MUSHROOMS

An indoor mushroom farm on its way to producing 500 pounds of oyster mushrooms per week.

PATCHWORK + BIKE A BEE

Two outdoor operations that supply vegetables to CSA subscribers and local honey to farmers market customers.

\$8-11 / sq. ft. / year

PLEASANT HOUSE

Pie shop and bakery capable of supplying a full-time restaurant and three farmers markets per week.

ARIZE KOMBUCHA

Distributes over 500 gallons of fermented tea per month to Chicago grocery stores.



The facility is a building, a business community and living laboratory all in one. The 93,500-square-foot former meat-packing plant was constructed in 1925 and operated by Peer Foods until 2007. In 2010, the building was acquired by a team of building refurbishment and DIY experts who envisioned the building as both a vertical farm and food business incubator.



Weekly Farmer's Market

The only farmer's market in Chicago where you'll find small batch coffee, gourmet mushrooms, kombucha, naturally leavened bread and fresh greens being sold in the same space they're produced.

Link and Senior Coupons are doubled up to \$25 per market.



Public Workshops

Aquaponics

A series of five workshops that introduce various aspects of designing, building and maintaining aquaponics systems.

Mycology

An introduction to growing your own mushrooms. Includes a tour of our mushroom lab and autoclave.



Local Schools

Classroom Visits

A Plant Chicago educator will introduce your class to closed loop systems, using a small aquaponic system and algae bioreactor to demonstrate concepts like waste reuse.

Hands-on Closed-Loop Labs

Students develop a deeper understanding of closed loop systems through supervised, interactive projects.

OWNERSHIP+OPERATIONS

Bubbly Dynamics, LLC: a social enterprise whose mission is to create replicable models for ecologically responsible and sustainable urban industrial development

FUNDING:

Facility Tours (\$7-10)

Donations

"\$25 allows us to distribute healthy food incentives for low income families at our farmers market."

"\$100 provides a free hands-on STEM workshop for youth from Back of the Yards and Chicago Public Schools."

Committees

Education Advisory Committee brings together educators to steer our educational programming.

Technology Advisory Committee is a diverse group of industry professionals who meet twice a year to guide our technology research.

Staff

Executive Director

Education and Outreach Manager

Market Manager

Outreach Associate

Technology Coordinator

Contact Information

Phone

(773) 847-5523

Email

info@plantchicago.org

Address

1400 W 46th St,
Chicago, IL 60609

Hours

Saturday 10AM-3PM

Albert Pick, Jr. Fund
Enkel Foundation
Forum Fund
Leo S. Guthman Fund
Lumpkin Family Foundation
PepsiCo Foundation
Walter S. Mander Foundation
USDA
Grant for Good

Cross-Case Analysis

Each case study offers lessons applicable to Peoria, Illinois, and a cross-case analysis of these organizations and what currently exists in Peoria further identifies the potential for the creation of a food hub within the community. The results of the cross-case analysis help identify pertinent guidelines which inform the ideas about a new facility incorporating the most relevant and impactful concepts used in each case.



PortFish Ltd.

While PortFish is located in the wealthiest county of Wisconsin, its business model is relevant for Peoria, Illinois. The remodeling of an aged agriculture storage building turned an unused structure into a sustainable farming facility. This type of facility can be replicated in many buildings that are currently abandoned in Peoria. The programs PortFish provides currently exist within the Peoria community. The owner has proven that with a small space and a small staff, change can still be made in a community.



Growing Power

The northern Milwaukee neighborhood where Growing Power resides has many similarities to the south side of Peoria, Illinois (e.g., disinvestment-generated vacant lot abundance, stretches of food deserts). It took great vision, motivation and selflessness for Will Allen to achieve what he has thus far. Will Allen's example offers a set of characteristics that Peoria stakeholders will need to emulate to make a similar impact in the community.



Urban Harvest STL

Urban Harvest STL provides a commendable model of coordinating and collaborating; Peoria, Illinois has a similar opportunity to come together in one coordinating entity in a manner similar to St. Louis. Each organization brings a certain unique specialty and target market to the overall entity. This model offers Peoria's community leaders involved in urban agriculture and public health an important precedent to support their altruistic concern for the well-being of their local community and individuals.



Prosperity Gardens

Lessons for Peoria, Illinois grow from location and programming decisions made at Prosperity Garden's inception. If the goal is to target a specific community or population, the effort must endeavor to locate as geographically proximate as possible to the people with which it hopes work. Not only does this offer a more accessible and convenient location, it also proves to the local neighborhood that the initiative is serious about making a difference there.



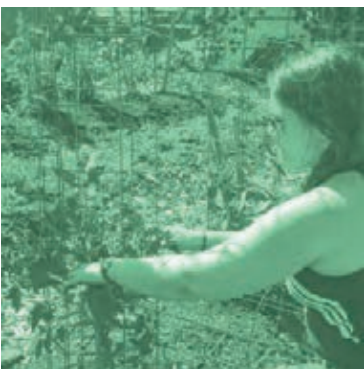
Recipe for Success

Recipe for Success has been very resourceful by using an existing kitchen and finding used kitchen appliances at lower costs. Peoria, Illinois can use this idea of resourcefulness by seeking out an existing commercial kitchen in an unused building or within an organization that does not use the kitchen all hours of the day. Two organizations can team together and share profits of rental fees while giving local chefs an opportunity to start their own food business.



National Foodworks Services

Location has proven to be the reason for success for National Foodworks Services, an organization providing a comprehensive set of services for all forms of food businesses. Because of Peoria, Illinois' close proximity to NFS and the same resources that have made NFS successful, it is suggested that partnering with NFS or starting a similar service business, could enable the same full-service food hub to support Peoria's existing and future food entrepreneurs.



Plant Chicago

Plant Chicago is located in a repurposed building that now supports a collaborative community of over a dozen small, food producing business all committed to materials reuse and closed loop systems. Peoria, Illinois can envision this as a model because of its abundance of abandoned buildings and potential for multiple closed loop businesses working together. While Plant Chicago is a large endeavor, the concept that drives it is scalable and absolutely achievable with the correct group of tenants.

Design Proposal

1411 SW Adams St, Peoria, IL

The selected site is located in the southeast region of the South Side Neighborhood, adjacent to the Warehouse District. The proposed design encompasses 14 existing parcels which currently hold five existing buildings ranging from one to three stories. These buildings as well as many of the buildings on the south side of Adams Street are owned by the George O Pasquel Company, a mainstay of this area since 1946, selling specialty coffee, foods, smallwares, and kitchen equipment.

The design for the chosen site consists of site design and the realization of the building's layout and function through three separate phases. Since it may be unrealistic to imagine the entire complex being repurposed and filled with tenants all at once, the phased approach is the best solution in representing the life of the complex throughout the future.



Phase 1:

The primary purpose of Phase 1 is growing, processing and packaging food for distribution in the general region of the site. The food being grown for distribution is produce from the vacant lots within a one mile radius of the site as well as a greenhouse and growing beds installed on the site. Over time the radius for the growing lots may expand, and the facility may also incorporate goods from rural vendors of Peoria, IL. One tenant, labeled as “anchor tenant” in the drawings below, is responsible for the life of the produce from maintaining the land to distributing the produce through a CSA program or a similar program. The open space formed on the north side of the building connected to the anchor tenant’s space can be used for an outdoor market that extends indoors through an overhead door.

Phase 2:

The addition of tenants within the food realm and tenants of any kind that have the best interest of the surrounding community are added in Phase 2, beginning to surround and support the anchor tenant. The furthest southwest space is used as a café or small restaurant, providing meals that use produce prepared by the anchor tenant. Equipment, dishware and beverages such as coffee could come from the Pasquel company. A commissary kitchen located in the one-story building on the northeast part of the site can support several local food businesses who may want to rent or use on the spaces permanently. For the use of the anchor tenant and the commissary kitchen tenants, a retail and produce shop is located on the street-facing side of the site. A commercial tenant is located adjacent the food tenant’s shop. Several spaces in the middle of the building are used for educational purposes or for community organizations and events.

Phase 3:

The building is completely utilized in Phase 3, and the site is upgraded to incorporate additional parking, new growing spaces and a chicken coop. The final ground floor tenant is designated as a local grocery store. This may take the form of a food co-op or another organization that is able to provide a wider range of goods for the surrounding community. The grocery store includes a space that connects to the anchor tenant, allowing for a physical and visual connection to the locations from which some of the goods are directly coming. A loading area is in the back of the grocery store’s space where an overhead door currently exists. Another addition in Phase 3 is the revitalization of the upstairs spaces for offices and residential tenants. Five offices can be accessed through the public access stairs on the north side of the building. Three residential spaces are located on the southwest part of the building, above the café and grocery store looking on to Adams Street. The upstairs has high ceilings and two of the larger offices incorporate existing skylights.

The drawings below include photos of the site, a map of the region, a site plan (showing Phase 3), a floor plan for each of the three phases and renderings of the front and rear of the site.

SITE PHOTOS



Southeast View



South View



Southwest View



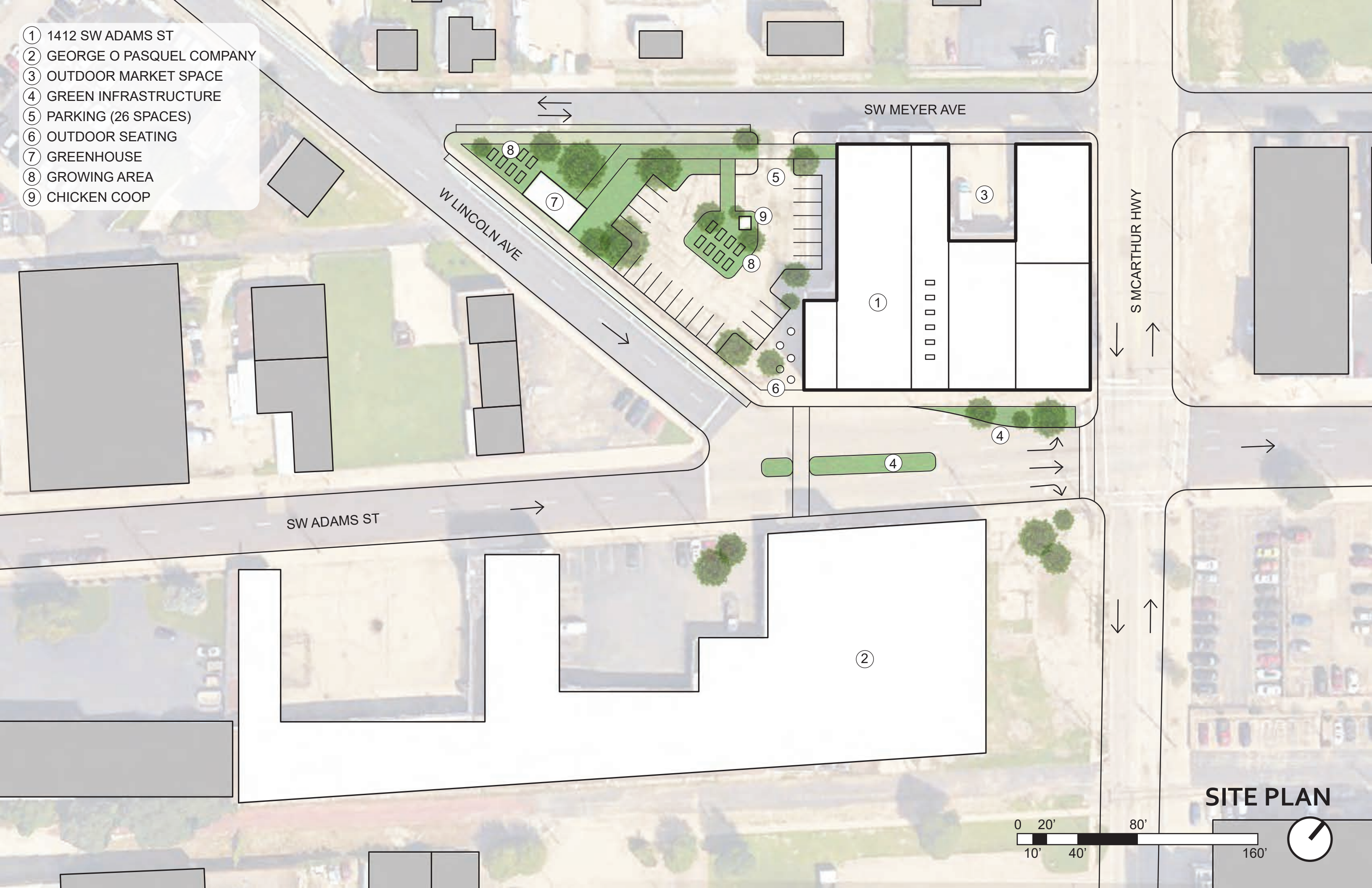
West View

LOCATION MAP

1411 SW Adams Street, the address of the selected site, is part of a campus of buildings owned by the George O Pasquel Company. The campus is an opportune site because of the bridge it creates between the South Side Neighborhood and the Warehouse District. With "Phase 1" of the proposed design being a facility where local produce is received, processed and packaged, the location lends itself to take advantage of what both the South Side and Warehouse District can provide. There is a large quantity of vacant lots within a 1-mile radius of the site, prohibiting maintenance and walkability from becoming a factor. The Warehouse District is currently being revitalized, bringing new residential units and other economic development to the area. The Pasquel campus serves as the connection that can provide a healthy development which in turn can encourage further revitalization in the South Side Neighborhood.



- ① 1412 SW ADAMS ST
- ② GEORGE O PASQUEL COMPANY
- ③ OUTDOOR MARKET SPACE
- ④ GREEN INFRASTRUCTURE
- ⑤ PARKING (26 SPACES)
- ⑥ OUTDOOR SEATING
- ⑦ GREENHOUSE
- ⑧ GROWING AREA
- ⑨ CHICKEN COOP



SITE PLAN

- ① FOOD ANCHOR TENANT 4500 SF
- ② OUTDOOR MARKET SPACE 3000 SF
- ③ MAINTENANCE SHOP 950 SF
- ④ GREENHOUSE 800 SF
- ⑤ GROWING AREA
- ⑥ PARKING (14 SPACES)

FUTURE EXPANSION

PHASE 1

FLOOR PLAN - PHASE 1



- ① FOOD ANCHOR TENANT 3500 SF
- ② OUTDOOR MARKET SPACE 3000 SF
- ③ MAINTENANCE SHOP 950 SF
- ④ GREENHOUSE 800 SF
- ⑤ GROWING AREA
- ⑥ PARKING (14 SPACES)
- ⑦ RETAIL FOR FOOD TENANTS 1000 SF
- ⑧ COMMISSARY KITCHENS 600-1200 SF
- ⑨ EDUCATION / COMMUNITY 600-700 SF
- ⑩ COMMERCIAL TENANT 1050 SF
- ⑪ CAFE 1350 SF

FUTURE EXPANSION

PHASE 1

PHASE 2

FLOOR PLAN - PHASE 2



- ① FOOD ANCHOR TENANT 3500 SF
- ② OUTDOOR MARKET SPACE 3000 SF
- ③ MAINTENANCE SHOP 950 SF
- ④ GREENHOUSE 800 SF
- ⑤ GROWING AREA
- ⑥ PARKING (26 SPACES)
- ⑦ RETAIL FOR FOOD TENANTS 1000 SF
- ⑧ COMMISSARY KITCHENS 600-1200 SF
- ⑨ EDUCATION / COMMUNITY 600-700 SF
- ⑩ COMMERCIAL TENANT 1050 SF
- ⑪ CAFE 1350 SF
- ⑫ LOCAL GROCERY STORE 6300 SF
- ⑬ PRODUCE FROM FOOD TENANTS 6300 SF
- ⑭ GROCERY LOADING / STORAGE 1250 SF
- ⑮ ANCHOR TENANT OFFICE 500 SF
- ⑯ PUBLIC LOBBY & STAIRS 400 SF
- ⑰ RESIDENT'S LOBBY & STAIRS 600 SF
- ⑱ CHICKEN COOP 75 SF

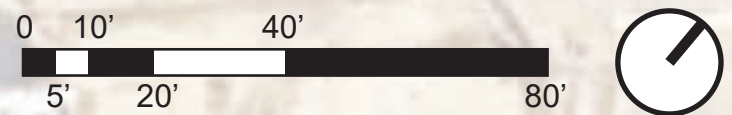
FUTURE EXPANSION

PHASE 1

PHASE 2

PHASE 3

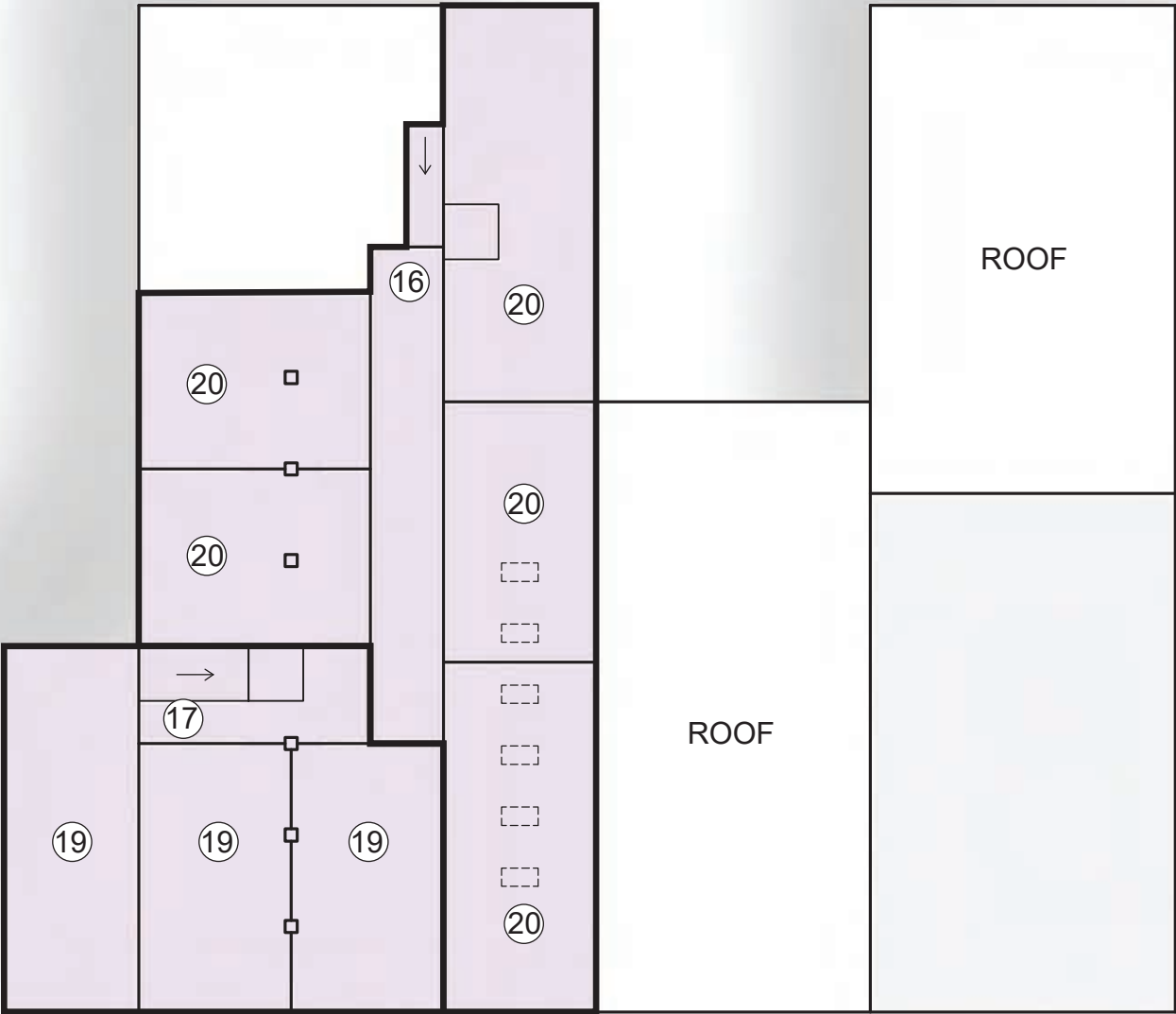
FLOOR PLAN - PHASE 3



- ①⑥ PUBLIC LOBBY & STAIRS 1000 SF
- ①⑦ RESIDENT'S LOBBY & STAIRS 600 SF
- ①⑨ RESIDENTIAL LOFTS 1000-1300 SF
- ②⑦ OFFICES 1000-1600 SF

FUTURE EXPANSION

PHASE 3



UPPER FLOOR PLAN - PHASE 3



SOUTHWEST VIEW: CAFE AND MARKET

To preserve the historic architectural character of the existing site, the front and sides of the building have not been altered besides reopening existing window openings. Instead, a series of lightweight structures attach to the façade to delicately introduce a new appearance to the building, one that celebrates the fusion of agriculture and architecture.

A series of cable-stayed canopies hang overhead the front sidewalk to shade both the café and market's interior spaces and outdoor seating during the summer. In the winter, the canopies can be retracted by adjusting the tension of its suspending cables with a hand-operated reel. To avoid covering signage when deactivated, the underside of these shades can have text similar to what is currently being shown as paint stenciled on brick.

Once the second floor's residential units become occupied, the new hydroponic shelving system can begin its production. A network of PVC-pipes pumps nutrient mixture vertically from the interior of each residence's window to a plant resting above on the exterior. This plant sits on a retractable shelf that allows tenants to hoist their plants vertically for all of Adams Street to admire. Furthermore, placing a living organism outside each residential window encourages tenants to dwell within a biophilic environment.

Windows have been enlarged on the ground level to maximize the entry of daylight into the building's long interior spaces and increase visual interaction with the café and market from the exterior.

The bioswales placed adjacent to the sidewalks are an extension of the City's green infrastructure initiative already in development along Adams St. These zones reduce stormwater flow into the City's overflowed sewer system while also creating a buffer between the pedestrian and the vehicle on the streetscape.



NORTH VIEW: COURTYARD

While the front of the building retains its original color palette, the back of the complex uses dramatic visuals to help connect to the reflecting Southside neighborhood. The building's main loading dock creates an exterior courtyard perfect for hosting events, such as a weekly Farmer's Market.

Colorful materials and community artwork flood this space in an effort to break free from the building's classic aesthetic. While the remainder of the back façade retains its existing white color, the collection of smaller loading docks offer opportunities to display more colorful moments.

The pedestrian crosswalk extends its striped pattern onto the pavement of the outdoor Farmers' Market, inviting Southside visitors onto the property in a manner that prioritizes the pedestrian. Permeable pavers customized by community members compose the surface's colorful bands of bricks.

For the market, plywood stalls are quickly assembled by simply placing a surface on top of the table's unfolding side supports.

The canopy above these stalls uses the same technology as the shading devices seen on the front of the building. The garage door on the back uses a similar system to unveil the market's interior space to its Southside residents.

The nickname "The 6" helps invent a sense of identity for the site in the Southside neighborhood by informalizing the area's zip code, 61605, which is frequently used to define the community.

