# THE PENNSYLVANIA STATE UNIVERSITY SCHREYER HONORS COLLEGE

### DEPARTMENT OF ARCHITECTURE

# UNLOCKING POTENTIAL: THE ARCHITECTURAL REDEMPTION OF EASTERN STATE PENITENTIARY

JOSHUA PONTELL SPRING 2024

A thesis submitted in partial fulfillment of the requirements for a baccalaureate degree in Architecture with honors in Architecture

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#### **ABSTRACT**

The gradual decommissioning of historic prisons across the United States due to aging, humanitarian concerns, and new laws which reduce rates of incarceration have led to physical voids in the form of closed prisons across America. These former prisons and the land which they occupy sit vacant, their many cells empty and their halls quiet. These structures and their stories, good, bad, and ugly, deserve to be heard, and to be used in ways which benefit the communities where these former prisons lie.

This thesis uses the Eastern State Penitentiary, a hub and spoke panopticon in Philadelphia, Pennsylvania as an example of how a space of this unusual typology can be utilized by the surrounding community year-round. This project is inspired by and utilizes techniques from Venetian architect Carlo Scarpa, who mastered the art of intervening in historic structures and carefully selecting what building elements and stories should be saved, and what need no longer exist.

# **TABLE OF CONTENTS**

LIST OF FIGURES	iii
ACKNOWLEDGEMENTS	v
Chapter 1 Introduction	1
Chapter 2 Failures in Adaptive Reuse and Historic Preservation	2
Chapter 3 Case Studies in Adaptive Reuse and Historic Preservation	5
Museo Di Castelvecchio - Carlo Scarpa El Roser Social Center - Josep Ferrando Architecture, Gallego Arquitectura	
Chapter 4 Literature Review	13
The Modern Cult of Monuments: Its Character and Its Origin - Alois Riegl The Transformative Potential of Ruins: A Tool for a Nonlinear Design Perspecti Adaptive Reuse - Elena Guidetti and Matteo Robligo Panopticism Chapter, Discipline & Punish, The Birth of the Prison - Michael Fo	ve in 14
Chapter 5 Eastern State Penitentiary: A Historical and Architectural Analysis.	17
Practical, Philosophical, and Religious Origins of Eastern State Penitentiary The Original Design and Construction of Eastern State Penitentiary Early Penal Philosophy of Eastern State Penitentiary and the Surrounding Area The Expansion of Eastern State Penitentiary and the Surrounding Area Demographics of Eastern State at its Peak, 1860-1920 The Pennsylvania System Under Fire The Decline of Eastern State Penitentiary From Prison to Ruin: The Future of Eastern State Penitentiary	18 22 23 24 25
Chapter 6 Unlocking the Potential of Eastern State Penitentiary	32
Site Analysis  Front Gatehouse: The New Eastern State Penitentiary Museum  Cellblock 1: A Window into Eastern State's Past.  Cellblock 2: Food Market  Cellblocks 3&7: Circulation  Cellblock 4: Performing Arts Center  Cellblock 5: Nature Center.  Cellblock 6: A Place for the Individual	33 34 35 36
Bibliography	39

# LIST OF FIGURES

Figure 1: Royal Ontario Museum, Studio Libeskind. Picture Credit: Maksim Sokolov3
Figure 2: Antwerp Port House, Zaha Hadid Architects. Picture Credit: Hufton+Crow4
Figure 3: A Severely Damaged Castelvecchio After WWII. Picture Credit: Giovanni Priante 7
Figure 4: Map of Verona, Italy
Figure 5: Castelvecchio First Floor Plan. Picture Credit: Base Plan From Filippo Bricolo & Bricolo Falsarella Associates
Figure 6: Castelvecchio Plan Pre-Scarpa Interventions. Picture Credit: Maria d'Anniballe9
Figure 7: Carlo Scarpa's Cangrande Space. Picture Credit: Cube design + research
Figure 8: Scarpa's "Window Boxes" at Castelvecchio. Picture Credit: Cube design + research 10
Figure 10: Translucent Connector in El Roser Social Center. Picture Credit: Adria Goula11
Figure 9: "Front" of El Roser Social Center. Picture Credit: Adria Goula
Figure 11: El Roser Centre Site Plan. Picture Credit: Josep Ferrando Architecture
Figure 12: El Roser Social Centre Axonometric, Post Adaptive Reuse. Picture Credit: Josep Ferrando Architecture
Figure 13: El Roser Social Centre Axonometric, Before Adaptive Reuse. Picture Credit: Josep Ferrando Architecture
Figure 14: Circular Panopticon
Figure 15: Hub and Spoke Panopticon
Figure 16: Major Institutions in Philadelphia, ca. 1855. Eastern State Penitentiary Included in Lower Right Corner. Picture Credit: Library Company of Philadelphia
Figure 17: John Haviland's Proposal For Eastern State Penitentiary, ca.1829. Picture Credit:  Norman Bruce Johnston
Figure 18: William Strickland's Design for the Western State Penitentiary, Similar to His Proposal for Eastern State, ca. 1826. Picture Credit: Angelique Bamberg
Figure 20: Plan of Two-Story Cellblock, 1837. Picture Credit: Demetz et al
Figure 19: Section of Two-Story Cellblock, 1837. Picture Credit: Demetz et al21
Figure 21: When Eastern State was in "Rural Philadelphia", 1833. Picture Credit: George Lehman22

Figure 26: Nativity Bar Graph. Picture Credit: Cohen et al	24
Figure 24: Prior Convictions Bar Graph. Picture Credit: Cohen et al	24
Figure 22: Prison Ages Bar Graph. Picture Credit: Cohen et al.	24
Figure 23: Prison Population Received Bar Graph. Picture Credit: Cohen et al	24
Figure 25: State Population Bar Graph. Picture Credit: Cohen et al	24
Figure 27: Construction of Electronic Gate Vestibule. Picture Credit: Temple University Libraries, Urban Archives	28
Figure 28: The Metal Central Tower at Eastern State, 2024	28
Figure 29: Eras of Construction at Eastern State	29
Figure 30: A Development Proposal for the Eastern State Site. Picture Credit: Eastern State Penitentiary Historic Site	
Figure 31: Monumental Axis of Philadelphia	32
Figure 32: Site Plan of ESP Post Adaptive Reuse	38

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#### Chapter 1

#### Introduction

Adaptive reuse is a highly dense and contreversial topic within the architectural sub-domain of historic preservation. Different ways of interpreting history, navigating site context, aesthetic prefrences, and external societal pressures are all factors that can influence the ultimate outcome of an adaptive reuse project. For the purposes of this thesis, adaptive reuse is defined as "The process of converting a building to a function which is significantly different from the original function" (Arfa, Lubelli, Zijlstra and Quist, 2022).

As prisons across America close due to aging facilities, humanitarian concerns, and reduced rates of incarceration, these massive sites full of historical significance and future potential are often left ignored. These structures, despite their negative history, deserve to undergo a deep exploration of their adaptive reuse potential. In this project, I aim to unlock the transformational potential of the Eastern State Penitentiary to benefit the surrounding community and redeem the structure for its past sins. This is important because an adaptive reuse project will encourage the full utilization of the Eastern State site – over 500,000 square feet in the middle of Philadelphia, create a more intimate relationship between the massive structure and the surrounding community, and illustrate how buildings, no matter how dark their history, can be leveraged as a positive device for the greater good. Ultimately, this work argues there are significant and notable opportunities within the Eastern State Penitentiary and the greater typology of panopticon prisons to demonstrate bold and provocative ways in which structures of this nature can be adaptively reused. To accomplish these goals, this project will distill what

determines a successful and unsuccessful intervention to a historic structure, utilizing Carlo Scarpa's adaptive reuse of the Castelvecchio in Verona, Italy and theories from "The Modern Cult of Monuments: Its Character and Its Origin" by Alois Riegl, "Discipline & Punish, The Birth of the Prison" by Michael Foucault, and "The Transformative Potential of Ruins: A Tool for a Nonlinear Design Perspective in Adaptive Reuse" by Elena Guidetti and Matteo Robligo. The resulting project capitalizes on these precedents and theories to craft a project that effectively analyzes, interrogates, and intervenes within the Eastern State Penitentiary. This project has three specific aims; to demonstrate how the panopticon prison typology has potential for adaptive reuse, reframe our understanding of how structures with brutal histories should be preserved, and leverage the use of subtractive, additive, and connective methods to "unlock" rigid structures and layer memory and meaning to a space, in the spirit of Carlo Scarpa's adaptive reuse of the Castelvecchio Museum in Verona, Italy. From a practical perspective, this thesis will provide a vision for what Eastern State Penitentiary could look like in the future, moving forward from its current use as a preserved ruin.

#### Chapter 2

# Failures in Adaptive Reuse and Historic Preservation

Since the renaissance and the way it reframed how people in the West thought about historic structures, various theories and documents have been developed to address the fate of these buildings, a knowledge domain within architecture which is still being expanded to this

day. Despite significant scholarship on this topic, from theorists such as Viollet-le-Duc, John Ruskin, Camillo Boito, and Alois Riegl, in addition to the Athens and Venice Charters, there are still adaptive reuse and historic preservation projects, constructed within the last two decades which fail to adequately connect with their historical canvas. These projects, despite their bold forms and gravity-defying structural systems, fall flat.



Figure 1: Royal Ontario Museum, Studio Libeskind. Picture Credit: Maksim Sokolov

Ideally, every architectural move performed on an existing structure or historic site is done with great thought and care, which can only exist through a deep understanding of the existing structure both architecturally and historically. There is nothing inherently wrong with adding "contemporary" additions of any form, materiality, and scale to historic structures, given that the form, materiality, and scale communicate a critique, acceptance, or some other stance on

the existing stucture that is appropriate to its backstory. Failure to comply with these fundamental rules results in structures that dissatisfy their inhabitants and leave a negative scar on the architectural legacy of a historic structure.



Figure 2: Antwerp Port House, Zaha Hadid Architects. Picture Credit: Hufton+Crow

Examples of such works include the Royal Ontario Museum addition, now known as the Michael Lee-Chin Crystal by Studio Libeskind and the Antwerp Port House by Zaha Hadid Architects. Both of these unjustifiably shaped additions are scaled to dominate the existing structures, which is not appropriate given the realtively neutral histories of the existing buildings. On the flipside, a strength of both projects is their use of contrasting materials which seeks to diffentiate eras of construction. This allows inhabitants to construct a mental timeline of a building and develop a greater appreciation for its history. Despite their major flaws, these two

projects still have value; they stand as warnings of how not to treat historic structures as a more appropriate approach is needed.

# Chapter 3

# **Case Studies in Adaptive Reuse and Historic Preservation**

The projects studied in this chapter successfully achieve the goals of an adaptive reuse project; that the forms, materials, and scale are all appropriate given the known history of the structures involved.

## Museo Di Castelvecchio - Carlo Scarpa

The Museo Di Castelvecchio is located in Verona, Italy, along the bank of the Adige River. The museum began its life as a castle constructed in the Middle Ages and experienced several constructions throughout its almost millennium-long existence. These include "the Commune wall (twelfth century); the Scaligeri Fortress (thirteenth and fourteenth); the nineteenth-century Napoleonic works, and lastly Avena's 'restoration' of the 1920's, each phase overlaying and partially obscuring the previous" (Murphy 8). During World War II the Castelvecchio suffered major damage, and Scarpa was tasked with "restoring" the ruinated museum. Instead of simply resurrecting Avena's restoration of the 1920's, which transformed the Castelvecchio into a museum modeled in the typology of a traditional Venetian Palace, Scarpa sought to expose the Commune and Scaligeri-era constructions of Castelvecchio while doing whatever was architecturally possible to weaken the influence of the more recent and much less

historically significant Napoleonic and Avena-era constructions. While removing every trace of the Avena restoration's interior was simple as it primarily consisted of finishes, completely removing the Napoleonic-era block from the complex would not be possible as it housed the bulk of the museum. It was this conflict of a desire to expose the older eras of construction with

the practical need of saving the current museum, housed within the Napoleonic block which created one of the most renowned works of adaptive reuse and historic preservation.



Figure 4: Map of Verona, Italy



Figure 3: A Severely Damaged Castelvecchio After WWII. Picture Credit: Giovanni Priante

Instead of utilizing addition as his primary tool to restore and improve the museum,

Scarpa utilized subtraction or "creative demolition" (Murphy). This concept of creative

demolition is most exemplified in what is now known as the Cangrande space, the site where

Scarpa newly placed the statue memorializing Cangrande I, a member of the of the della Scala

family which ruled Verona in the 14<sup>th</sup> century and a major art piece at the Museo di

Castelvecchio (Van Tilburg). The Cangrande space lies at the intersection where the Napoleonic

construction meets the Commune wall, including an exterior staircase from the Napoleonic

period built in the corner where the two eras of construction meet. Using the concept of creative

demolition, Scarpa demolished one bay of the Napoleonic block adjacent to the Commune Wall,

in addition to the staircase. This demolition revealed the Porta del Morbio, a gate constructed as

a part of the Commune wall and completely hidden by the Napoleonic additions (Murphy 8). In

this crucial architectural move Scarpa liberated the Commune wall from the much more recent

Napoleonic construction. (D'Anniballe)

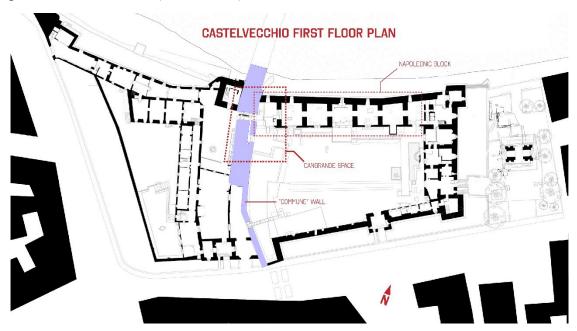


Figure 5: Castelvecchio First Floor Plan. Picture Credit: Base Plan From Filippo Bricolo & Bricolo Falsarella Associates

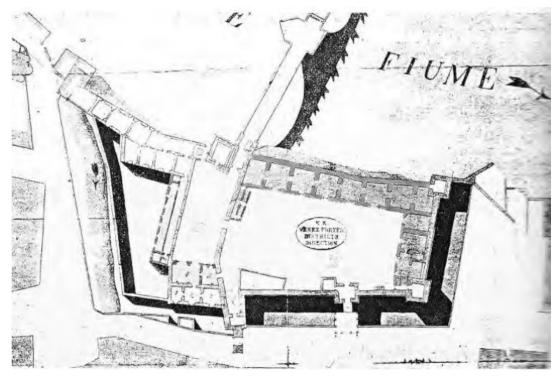


Figure 6: Castelvecchio Plan Pre-Scarpa Interventions. Picture Credit: Maria d'Anniballe

Scarpa designed a ground floor which traversed multiple levels and linked the now-uncovered Porta del Morbio with the modified Napoleonic wing. The new ground floor of the Cangrande space is offset a few feet short of the walls that surround it, and this allows for a portion of the moat constructed with the original fortress in the 13<sup>th</sup> century to become visible once again. The second level is reconnected with a bridge cutting across the void at a 45-degree angle from the axis of the Napoleonic wing. Along the edge of the Napoleonic wing that was still standing Scarpa exposed layers of the wall's construction, including ashlar stone blocks which were covered with stucco. In addition, he cut into the wall edge to make the wall appear thinner than reality. This architectural move, known as "delamination" (Murphy 15) is Scarpa's attempt to contrast the heaviness and eternal nature of the Commune wall with the more recent and lower

quality Napoleonic wing. Along the partially demolished wall of the Napoleonic wing is the "front" façade of the museum, facing Castelvecchio's courtyard. As a way of furthering the delamination of this wall, Scarpa demolishes the existing windows dating from the Avena restoration and replaces them with "window boxes" set feet back from the existing wall, which are cubic in nature and ignore the geometry of the arched openings where they are hosted.



Figure 7: Carlo Scarpa's Cangrande Space. Picture Credit: Cube design + research



Figure 8: Scarpa's "Window Boxes" at Castelvecchio. Picture Credit: Cube design + research

Scarpa's use of delamination extends beyond walls; he applies the same concept to the roof of the Napoleonic wing, exposing a layer of the roof surface underneath the terra cotta roof tiles which he renders in an oxidized copper. A singular metal beam under the apex of the roof connects to the commune wall and supports the Napoleonic roof. Highlighting how the Napoleonic roof relies on the older commune wall establishes a hierarchy of construction eras and expresses the dominance of the original commune wall over the Napoleonic wing.

### El Roser Social Center - Josep Ferrando Architecture, Gallego Arquitectura

Standing in a prison turned school turned social center, the El Roser Social Center in Tarragona, Spain transforms a prison structure from 1929 into a building providing social services to those in the community who most need them. Strategic insertions rendered in translucent cladding and light steel structural elements allow for this former prison and school to provide social services such as food distribution, emergency residential accommodations, and job placement (Reus.cat El Roser Center).



Figure 10: "Front" of El Roser Social Center. Picture Credit: Adria Goula



Figure 9: Translucent Connector in El Roser Social Center. Picture Credit: Adria Goula

While the floor plan of the existing building is generally preserved, a few necessary openings are punctured into the existing labyrinth to allow for improved circulation. Walls shielding the prison from the street are removed, altering how this site interacts with the urban fabric in a more open way appropriate to its new program (Josep Ferrando Architecture). This project illustrates how structures, even those with complicated and negative histories can be adaptively reused by acknowledging its past and using it as a driving notion for its architectural transformation.

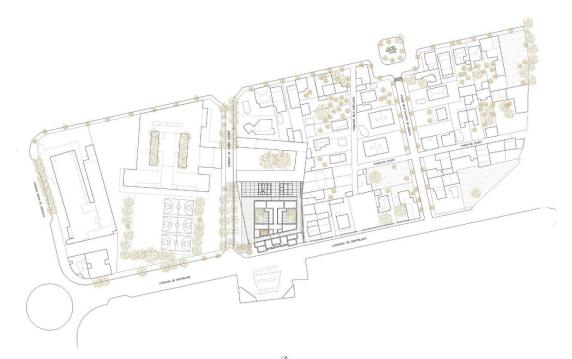


Figure 11: El Roser Centre Site Plan. Picture Credit: Josep Ferrando Architecture



Figure 13: El Roser Social Centre Axonometric, Before Adaptive Reuse. Picture Credit: Josep Ferrando Architecture



Figure 12: El Roser Social Centre Axonometric, Post Adaptive Reuse. Picture Credit: Josep Ferrando Architecture

# Chapter 4

#### Literature Review

# The Modern Cult of Monuments: Its Character and Its Origin - Alois Riegl

The historical value of monuments is a deeply meaningful debate that extends beyond the discipline of architecture. Austrian art historian Alois Riegl seeks to give his opinion on this topic, dividing his opinion into an analysis of a monument's artistic and historical values. He attributes the origin of this debate to 15<sup>th</sup> century Italy, a time of renewed Italian patriotism and a longing to return to the values of ancient Rome (Riegl 26).

Riegl explains how the way in which we view monuments is shaped by our modern perception of them, so a monument's value can change over time (Riegl 23). He splits monuments into intentional and unintentional groups, with intentional monuments deriving their value from their maker, while unintentional monuments derive their value from society (Riegl 23). Memory is a powerful device partially invoked by historical reality and our own imagination. All historic structures possess the power of memory, as we find interest in a bygone era when these structures were in their prime (Riegl 23-24).

As for how ruins should be treated today, Riegl advocates for a relatively strict hands-off approach, believing it's unacceptable and inappropriate to disrupt nature's constant interaction with ruins. Riegl believes the passing away of monuments from natural erosion is what gives ruins their aesthetic satisfaction to the viewer (Riegl 32). One caveat is acknowledged, with Riegl stating "Of course, this process has its limits. When finally nothing remains, then the effect vanishes completely. A shapeless pile of rubble is no longer able to convey age-value; there must

be at least a recognizable trace of the original form, that is, of man's handiwork, whereas rubble alone reveals no trace of the original creation" (Riegl 33).

# The Transformative Potential of Ruins: A Tool for a Nonlinear Design Perspective in Adaptive Reuse - Elena Guidetti and Matteo Robligo

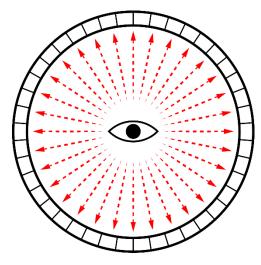
This text explains how our memory of buildings can be modified depending on how architects decide to intervene in existing buildings. What specifically is done to existing structures is a deeply fundamental political choice on what aspects of structures and their memory should be passed down to future generations (Guidetti and Robligo 1). The journal article explains the importance of considering new approaches to how architects engage with historic structures. Restoring structures to their past appearance and use should not be the only approach that is considered. It is mentioned that every existing structure has potential that can be released when proper adaptive reuse principles are implemented.

The article specifies and gives examples of five different types of "transformative potentials", including active ruin-ificative potential, hard constructive potential, passive ruin-ificative potential, soft constructive potential, and ideal reconstructive potential (Guidetti and Robligo 3). In order to properly categorize and describe the state that a ruin is in, the article cites Brand's concept of shearing layers. These include "'Site' (urban location, which is 'eternal'); 'structure' (foundations and load-bearing elements, with lifespans ranging from 30 to 300 years); 'skin' (exterior surfaces might change every 20 years); 'services' (communications wiring, electrical wiring, plumbing, etc., with lifespans from seven to 15 years); 'Space Plan' (interior layout, such as walls, ceilings, floors, etc., which might change in three to 30 years; and 'stuff'

(furniture can change continuously)" (Brand). The concept of shearing layers is limiting, as it excludes the adaptive reuse of infrastructure which typically does not possess many of the shearing layers described previously (Guidetti and Robligo 18). The goal of this article is to demonstrate there are various approaches for how ruins can be adaptively reused based on the state of the ruin, the history behind it, and what history is worthy of being brought into the future or left behind.

# Panopticism Chapter, Discipline & Punish, The Birth of the Prison - Michael Foucault

This chapter in Discipline & Punish, The Birth of the Prison by French philosopher Michael Foucault explains the history of the panopticon, its use, and its meaning. The panopticon had its origins in the need for containing disease, including dividing up towns into zones and other smaller units. While everyday citizens remained isolated, a class of guards and others could move freely to distribute resources and keep a watchful eye on the town (Foucault 195). Foucault states "there was also a political dream of the plague, which was exactly its reverse; not the collective festival, but strict divisions; not laws transgressed, but the penetration of regulation into even the smallest details of everyday life through the mediation of the complete hierarchy that assured the capillary functioning of power" (Foucault 197-198). To Foucault, the idea of the panopticon originated from the dream of societal control and the preservation of power.



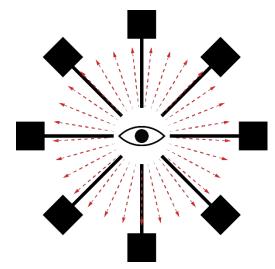


Figure 14: Circular Panopticon

Figure 15: Hub and Spoke Panopticon

English philosopher Jeremy Bentham is given credit for the Panopticon as it is understood today, the architectural manifestation of power and control. The panopticon, consisting of a tall tower with panoramic views with spokes emanating from the tower or a circular building surrounding the tower is the physical expression of hierarchy created by this architectural form. Foucault writes "He is seen, but he does not see; he is the object of information, never a subject in communication. The arrangement of his room, opposite the central tower, imposes on him an axial visibility; but the divisions of the ring, those separated cells, imply a lateral invisibility. And this invisibility is a guarantee of order" (Foucault 200).

Another focus of Foucault is the panopticon's use as a laboratory. Foucault determines that the panopticon is not simply a building, it is a machine capable of housing experiments on people. These experiments could be social or scientific in nature (Foucault 203-204). Bentham sees the Panopticon and its capabilities of control and experimentation very positively. Foucault

quotes Bentham, stating "Morals reformed – health preserved – industry invigorated – instruction diffused – public burdens lightened – Economy seated, as it were, upon a rock – the gordian knout of the Poor-Laws not cut, but untied – all by a simple idea in architecture! (Foucault 207, Bentham 39).

### Chapter 5

Eastern State Penitentiary: A Historical and Architectural Analysis

Practical, Philosophical, and Religious Origins of Eastern State Penitentiary

Eastern State Penitentiary's origins can be tied back to the PPS (Philadelphia Society for Alleviating the Miseries of Public Prisons), which has quaker ties in its members and ideology. The ideological founders of Eastern State Penitentiary were looking to make reforms to the colonial penal system which they viewed as too harsh and lacked focus on rehabilitative practices. Many of the ideas that would be implemented at Eastern State through the PPS were formed in Europe and transferred to America by way of increased trade with Europe (Cohen et al. 44). Besides the discussion of ideas amongst influential Americans including doctor and scientist Benjamin Rush, quaker iron merchant Caleb Lownes, and quaker philanthropist Roberts Vaux, the PPS was actively working to put their ideas into law. A significant legislative victory for the PPS occurred in 1786 when the Pennsylvania legislature voted to implement prison labor in place of capital and corporal punishment. In addition to the PPS, other events relating to the Philadelphia prison system led to the eventual construction of Eastern State, including the poor facilities and administration at the existing Walnut Street Jail. Adding to the problems,

Pennsylvania's population growth spurred an increase in the prison population, leading to severe prison overcrowding. To alleviate the numerous issues, the Pennsylvania legislature passed acts in 1818 and 1821 providing funds for the construction of prisons in western and eastern Pennsylvania, respectively (Cohen et al. 45-49).

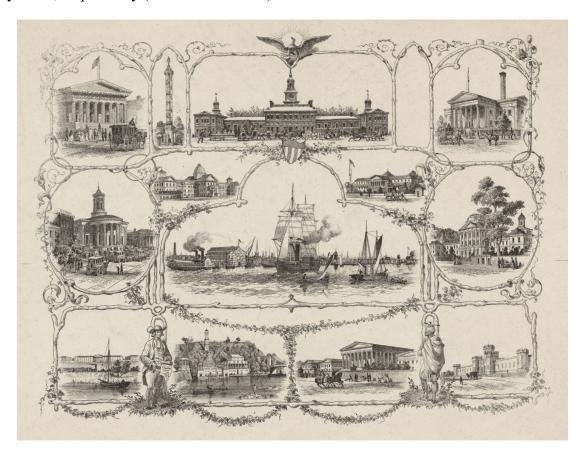


Figure 16: Major Institutions in Philadelphia, ca. 1855. Eastern State Penitentiary Included in Lower Right Corner. Picture Credit: Library Company of Philadelphia

### The Original Design and Construction of Eastern State Penitentiary

Upon the approval of funding for the prison serving the eastern half of Pennsylvania, architects William Strickland and John Haviland competed for the opportunity to design what would become the Eastern State Penitentiary. Having already designed the Western State

Penitentiary near Pittsburgh, Strickland proposed an octagon-shaped structure, featuring a circular panopticon like his previous design. Haviland, however, proposed a hub and spoke panopticon design of seven spoke-like cellblocks emanating from a central tower hub, all surrounded by a square-shaped perimeter of 30-foot-tall walls. The decision on the winner of this architectural competition went beyond aesthetics and experience. It was philosophical in nature, involving whether prison labor would be a fundamental part of a prisoner's time at Eastern State Penitentiary. Strickland's design for the Western State Penitentiary and his similar proposal for Eastern State did not include spaces for prison labor, while Haviland accommodated spaces into

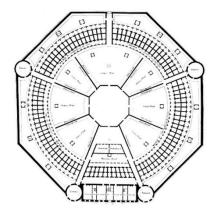


Figure 18: William Strickland's Design for the Western State Penitentiary, Similar to His Proposal for Eastern State, ca. 1826. Picture Credit: Angelique Bamberg

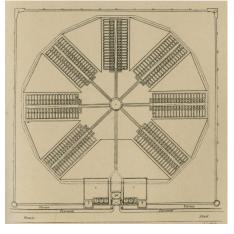


Figure 17: John Haviland's Proposal For Eastern State Penitentiary, ca.1829. Picture Credit: Norman Bruce Johnston

his design, in the form of work yards attached to every cell. Despite Strickland's experience designing prison architecture for the state of Pennsylvania, the ideological leanings of the building committee, which supported prison labor won out, and Haviland was awarded the project in 1822 (Cohen et al. 50).

In May of 1823 construction began on the perimeter walls, and cellblocks one, two, and three. Alterations on the design of the penitentiary, originally known as "Cherry Hill" continued even as construction commenced, including variations on the number of cells in each cellblock

and the styling of the front entry building. Between the seven planned cellblocks were triangular yards, which had adequate space for additional buildings serving the penitentiary to be built. Haviland was against inserting structures in the triangular yards in between the cellblocks, however this would be ignored by future additions to Eastern State. Completed in 1829, the first three cellblocks were one story tall, and built of stone. Between 1831 and 1836, cellblocks four, five, six, and seven were constructed, each cellblock being two stories tall. While the cells in the first three cellblocks were only accessible from the cell work yards, cellblocks 4-7 had normal doors into the corridors (Cohen et al. 79,81).

The construction of Eastern State was only possible due to the new development of advanced building system technologies for its time, including sanitary plumbing, water supply, water heating, ventilation, and daylighting. Every cell was equipped with a water closet, which made bathing in one's cell possible by the sewer and water supply systems built into the structure. Bathing was considered important not just for hygienic reasons but also for it being seen as a way of washing away one's sins (Cohen et al. 89, 95, 102). Eastern State's use of skylights was also revolutionary, with the structure being one of the first major building projects in the United States to utilize skylights, as Haviland recognized the need for light and air for the penitents. Built into every cell was a skylight that could also function as an air vent, in addition to an outdoor space in the form of a work yard as discussed earlier. Designing ventilation into Eastern State was a priority not just for the day-to-day comfort of penitents, but to reduce the spread of tuberculosis, a major threat at the time of Eastern State's construction (Cohen et al. 192). Two-story cellblocks were designed with a slightly offset second story exterior wall, allowing for both stories to have skylights. The site of Eastern State was chosen in part due to its

distance from Philadelphia in the 1820's, which would avoid the polluted air of the downtown area (Cohen et al. 108-111).

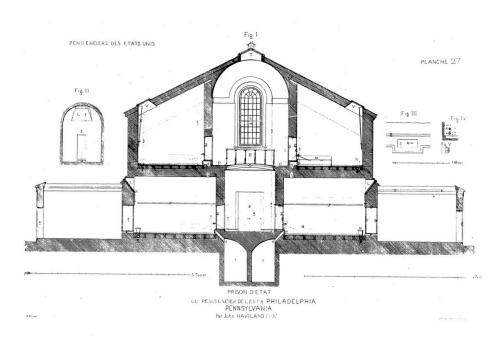


Figure 20: Section of Two-Story Cellblock, 1837. Picture Credit: Demetz et al.

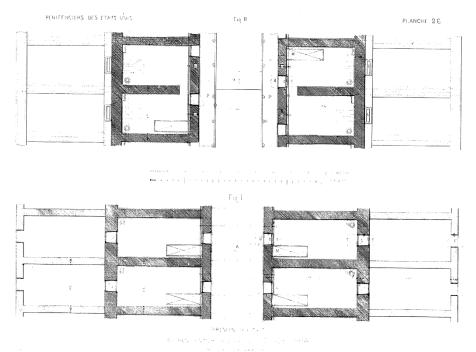


Figure 19: Plan of Two-Story Cellblock, 1837. Picture Credit: Demetz et al.



Figure 21: When Eastern State was in "Rural Philadelphia", 1833. Picture Credit: George Lehman

### Early Penal Philosophy of Eastern State Penitentiary

From 1829 to 1913 Eastern State Penitentiary operated under the Pennsylvania System of imprisonment. What distinguished the Pennsylvania System from its competitor, the Auburn System of New York, was its use of solitary confinement. Eastern State was seen as the ideal place to implement the Pennsylvania system, as the penitentiary's system of adjacent cells and work yards illustrated that the controversial system was a part of the penitentiary's architectural DNA.

Prison labor was part of the daily life of penitents throughout Eastern State's use as a prison. Prison labor was celebrated by public officials since the goods it produced were sold to

offset the cost of operating the prison. The use of prison labor was so productive that Eastern State turned a profit while the prisoners received no compensation for their work. Early on, prison labor at Eastern State included weaving, shoemaking, and woodworking. As Eastern State took on more prisoners and the need to build more cells persisted, new cellblocks were primarily constructed with prison labor (Cohen et al. 157, 162).

### The Expansion of Eastern State Penitentiary and the Surrounding Area

Between 1820 and 1860, the area surrounding Eastern State Penitentiary transformed from a rural to urban area as Philadelphia expanded beyond its historic center. The population of the surrounding Spring Garden district expanded from 3,498 to 32,091 individuals in that period (Cohen et al. 169). As the population outside the four walls expanded, so did the population inside.

Overcrowding at Eastern State precipitated the construction of cellblocks eight, nine, ten, and eleven between 1877 and 1893. These cellblocks featured cells larger than those of the original cellblocks, however no work yards were constructed. Cellblocks eight, nine, ten, and eleven marked the end of Haviland's geometrically perfect panopticon plan, and from this point on numerous additions and outbuildings such as a boiler house, industrial structure, workshop, and hospital would begin to fill in the cellblock yards. In 1911 three-story cellblock twelve was built. Breaking from tradition, it was constructed with reinforced concrete instead of stone.

Fifteen years later in 1926, cellblock fourteen was built, also rendered in reinforced concrete. It was wedged in between cellblocks eleven and three (Cohen et al. 182-184, 240).

### Demographics of Eastern State at its Peak, 1860-1920

Although population statistics have been kept by Eastern State since its opening in 1829, the most complete statistics remain from the period between 1860 and 1920, at Eastern State's peak of operation. Notably missing from the following graphs is one on the gender population. Although women were imprisoned at Eastern State, they never consisted of more than three percent of the total inmates, and the prison became an entirely male institution when all female prisoners were transferred to the Muncy Prison in 1923. Also notable is the population of nonwhite inmates. "White men constituted the largest percentage of the population sentenced to Eastern State Penitentiary. There is, however, a disparity that might be overlooked by such a statement. Although they comprised small numbers that remained fairly constant over time, the

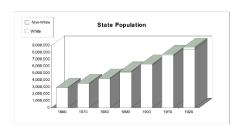


Figure 26: State Population Bar Graph. Picture Credit:



Figure 23: Prior Convictions Bar Graph. Picture



Credit: Cohen et al

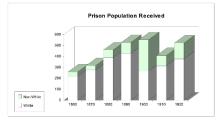


Figure 25: Prison Population Received Bar Graph. Picture Credit: Cohen et al.

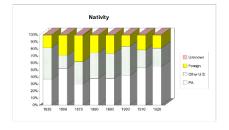


Figure 22: Nativity Bar Graph. Picture Credit: Cohen et al.

Figure 24: Prison Ages Bar Graph. Picture Credit: Cohen et al.

percentage of African American men sentenced to Eastern State always remained overrepresented relative to the city and more strikingly relative to the state" (Cohen et al. 198).

#### The Pennsylvania System Under Fire

Towards the turn of the 20th century the Pennsylvania system, the penal philosophy which grounded Eastern State was beginning to be challenged by more harsh and hopeless views of criminals. A popular idea at the time was the genetic predisposition of certain people to commit crimes, and how the urban lifestyle encouraged these behaviors. The increasing popularity of these views amongst penal institutions would begin the demise of the Pennsylvania system. Highly resistive to change, the state of Pennsylvania and therefore Eastern State Penitentiary was one of the final places to legalize parole and sentencing commutation in the US. Solitary confinement, a defining aspect of the Pennsylvania system, was abandoned as the prison population grew dramatically at Eastern State. Nearly every cell had at least two inmates living in it (Cohen et al. 172, 197).

Throughout its history as a prison, Eastern State was inspected numerous times as state authorities wanted to observe the prison conditions and the implementation of the Pennsylvania System. Major inspections in 1834, 1897, and 1903 alerted authorities to poor facilities, inadequate diets among the penitents, abuse by staff, and insanity driven by its system of solitary confinement. These poor living conditions can be seen in the book *A Tale of A Walled Town and Other Verses*, a collection of poems written by inmates at Eastern State. The first poem, also named A Tale of A Walled Town, says:

Ours is a grimy bit of blue; And very small; And sunbeams scarce adventure to O'ertop the wall. A bird that flutters swiftly by; A wind that passes with a sigh; A cloudlet sailing slow and high; And that is all. O matins, and O vesper bells, Toll slowly! A city of a thousand cells-A thousand individual hells. Their walls of stone and bars of steel, So cold to see and cold to feel, They make the warmest heart congeal, Like to the wall. And therein walk the living dead, Their hands so deeply dyed in red,

That even hope from them has fled,

Beyond recall. (1-20)

While Eastern State management suffered little consequences from the appalling inspections, these concerns would be one of the motivations for constructing the Graterford Prison in 1928 to replace Eastern State (Cohen et al. 203-204).

### The Decline of Eastern State Penitentiary

The operation of Eastern State Penitentiary changed significantly in 1953, when the passing of a new state law resulted in the division of Eastern State Penitentiary into two institutions, the State Correctional Institution at Philadelphia (SCIPHA), and the Eastern Correctional Diagnostic and Classification Center (ECDCC). The SCIPHA would function as a maximum-security facility for up to 500 inmates, while the ECDCC served as a body to assign newly incarcerated individuals to the proper prison facility. The SCIPHA operated in the entire prison with the exception of cellblocks fourteen and three, which were utilized by the ECDCC (Cohen et al. 242).

Despite the deteriorating facilities, a few notable interventions were made to extend the lifespan of Eastern State. These included replacement of the original gates with electronically operated ones and the construction of an accompanying masonry vestibule in the late 1930's, the replacement of the original wooden central tower with a metal one, demolition of the old power plant, the addition of new offices for inmate processing in the sector between cellblocks eight and nine in 1941, and cellblock fifteen, completed in 1959. The construction of cellblock fifteen marked the final addition to Eastern State as a prison and penitentiary (Cohen et al. 242).

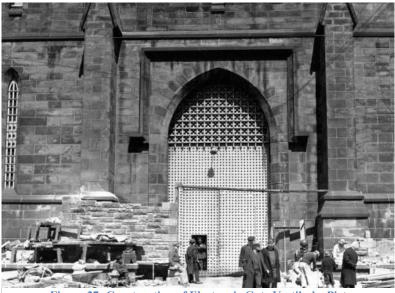






Figure 28: The Metal Central Tower at Eastern State, 2024

Small upgrades were not enough to save the massive penitentiary structure from eventual closure. The Pennsylvania state legislature failed to develop a plan to reconstruct or move Eastern State to another site, and in 1963 it was announced that Eastern State would prepare to close. Over the next seven years, prisoners were transferred to the Graterford Prison and other facilities (Cohen et al. 243).

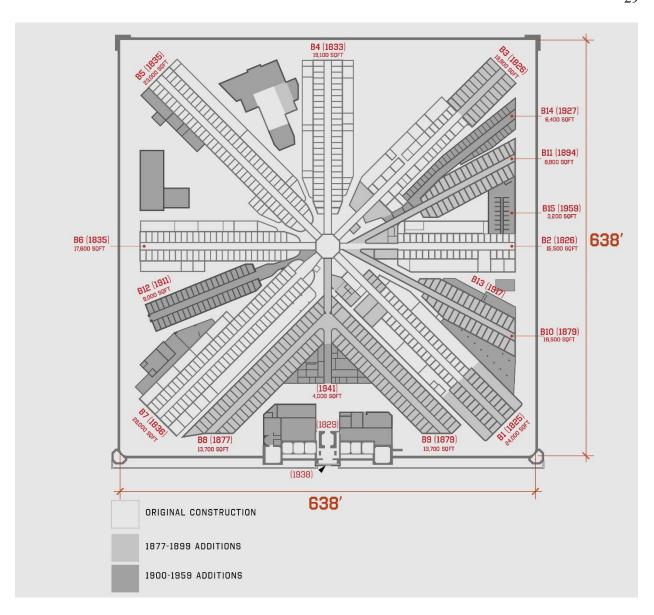


Figure 29: Eras of Construction at Eastern State

# From Prison to Ruin: The Future of Eastern State Penitentiary

When it closed for good in 1971, Eastern State was used initially as a storage facility. A lack of maintenance allowed the forces of nature to enter the complex. Shattered glass, collapsed walls, caved-in roofs, and water intrusion were common sights. Vegetation completely took over the site, with trees, vines, and other plants creating a forest contained within the four walls of Eastern State. Thieves scaled the 30-foot walls and stole building materials from the disintegrating structures.



Figure 27: Overgrown Eastern State Site, 1987. Picture Credit: David Cornelius



Figure 28: Vegetation Taking Over Cellblock at Eastern State. Picture Credit: Richard W. Longstreth

Outside the four walls, a debate raged about the future of the Eastern State Penitentiary site. Numerous futures for the site were proposed, including housing, a recreation center, supermarket, and a criminal justice center. Many proposals, including one for housing suggested a large-scale demolition of Eastern State, only preserving a few cellblocks and the outer walls while constructing parking lots inside the complex. The surrounding community considered Eastern State a historical and community asset worthy of being preserved and disapproved of proposals that demolished substantial parts of the structure (Cohen et al. 277).

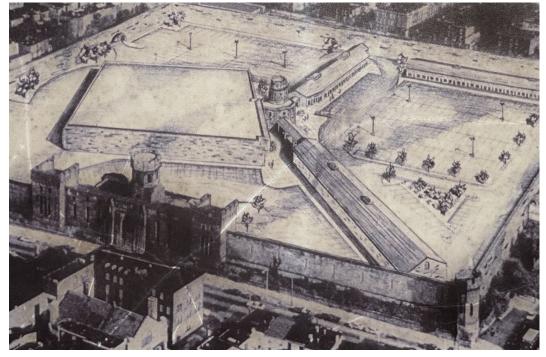


Figure 30: A Development Proposal for the Eastern State Site. Picture Credit: Eastern State Penitentiary Historic Site

In 1991 work to stabilize and preserve Eastern State and its over 150 years of history began after large donations from the Pew Charitable Trust, and in 1994 the Penitentiary opened to the public full-time as a preserved ruin. Besides hosting public tours, Eastern State has been used as a movie set, exhibition space for criminal justice related art installations, and as a haunted house (Eastern State Penitentiary Historic Site, Inc. Timeline). Over the years there have been continued efforts to save parts of Eastern State, including the entirety of cellblock seven and preventing the intrusion of water into the structure. Despite these efforts significant portions of Eastern State are not safe for public visitation, including cellblocks five, six, twelve, and fourteen, and several outbuildings on the site.

# **Chapter 6**

# **Unlocking the Potential of Eastern State Penitentiary**

# **Site Analysis**

Eastern State Penitentiary sits at the crossroads of Philadelphia's monumental axis and the southern edge of Northern Philadelphia, in the Fairmount neighborhood. This axis currently connects the Philadelphia Art Museum with Penn's Landing along the Delaware River. Other Philadelphia landmarks lie along this axis, including the Barnes Foundation, Franklin Institute, City Hall, Reading Terminal Market, and Independence Mall. While Eastern State is located in the well-to-do Fairmount neighborhood, to its north lies neighborhoods such as North Central, Stanton, Poplar. and Strawberry Mansion, which lack many of the great resources Fairmount and Center City has to offer.

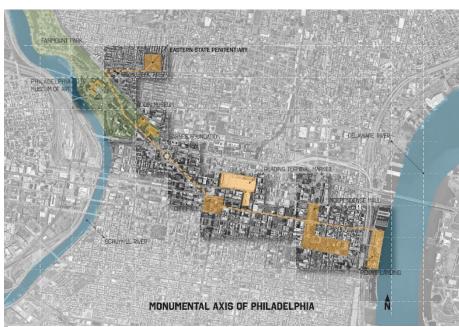


Figure 31: Monumental Axis of Philadelphia

Eastern State has become a tourist attraction in its pursuit to educate the public about the history and horrors of the historic complex. Taking up over 500,000 square feet or just over 12 acres, the Eastern State site remains a massive, closed off section of the city, completely inaccessible save for a singular, intimidating archway. This massive structure, once designed to confine and drive people insane, can be unlocked for the good of the community and redeemed for its sins. Immovable masonry walls can be broken through, and light coming from a source other than above can grace the space for the first time in its history. The dichotomy of the square fortress walls and the panopticon prison can be reconciled. These layers of spatial enclosure envisioned by Haviland 200 years ago can be leveraged into a community asset. Eastern State's future exists not as a former prison, but as a hub, connector, and center for community life in Philadelphia.

#### Front Gatehouse: The New Eastern State Penitentiary Museum

Eastern State's front gatehouse was always the first and final destination for penitents held at Eastern State, in addition to a symbol of the penitentiary for the public who lived around but never entered the complex. With all the significant architectural modifications proposed to Eastern State in this thesis, the front gatehouse in addition to cellblock one stand as largely untouched relics of Eastern State's past. The many new openings that this project proposes be cut into the existing perimeter walls decenter the gatehouse opening, leaving it largely untouched. The gatehouse is to be transformed into a museum, a place to host the many artifacts from when Eastern State operated as a prison.

#### **Cellblock 1: A Window into Eastern State's Past**

The first cellblock at Eastern State, completed in 1829, is a space which captures the most accurate snapshot of Haviland's vision of Eastern State Penitentiary. The trials and tribulations of designing a building form unprecedented at the time exist in this structure, including rounded "dead eye" skylights, and rounded corners constructed to improve the sightlines of prison guards (Cohen et al. 108). This space will be mostly untouched along with the front gatehouse.

#### Cellblock 2: Food Market

Access to fresh, nutritious ingredients and foods are an important building block of living a healthy and happy life. Unfortunately, many parts of Philadelphia lack access to these nutritious foods as fast foods and frozen meals are much more readily available, contributing to a lower life expectancy and overall quality of life. According to the Philadelphia Department of Public Health Division of Chronic Disease and Injury Prevention, "Almost 1 million Philadelphians have more than two stores with low-produce supply within walking distance of their homes, more than 4 of 5 retail food stores in Philadelphia stock substantial amounts of unhealthy food and have low produce supply, and only 1 in 9 stores in the typical neighborhood offers significant amounts of produce and healthy food" (Neighborhood Food Retail in Philadelphia). A food market, located in cellblock two, is more than a supermarket; it's a place which cultivates a positive food culture by showcasing the amazing fresh foods and ingredients that the Philadelphia region has to offer, providing spaces to enjoy such foods in all seasons.

The Fairmount Farmers Market is located along the perimeter of a parking lot across the street from Eastern State. The modifications to cellblock two will be the new home of the Fairmount Farmers Market, allowing it to stay open seven days a week and have an expanded offering of fresh foods. The new and improved Fairmount Farmers Market will expand the access of fresh and nutritious foods beyond the Fairmount neighborhood and to the surrounding areas where healthy food options are scarce.

#### Cellblocks 3&7: Circulation

Unlike other cities in the United States, especially New York with its well-known High Line, Philadelphia lacks connective infrastructure above ground. Many disadvantaged communities in Philadelphia, to the north and northeast of Eastern State lack a direct route towards Fairmount Park and the city's monumental axis. Compounding this problem, subway lines don't link these two areas together. Increased usage of bicycles can help bridge this gap in connection, a trend that is already occurring in the city. According to the bicycle coalition, bicycle traffic is up 29% compared to the previous year (Boyle).

Cellblocks three and seven are deconstructed to create an open-air channel conducive to walking, running, and biking, cutting diagonally northeast to southwest across Philadelphia's street grid. Through this new connection between opposite corners of the Eastern State site, Corinthian Avenue is linked with Fairmount Avenue and North 22<sup>nd</sup> street. This intervention encourages the use of sustainable transportation methods by providing a highly unusual but fascinating space and shortcut to travel through. Increased traffic from the new pathway carved

through the former penitentiary also functions as a magnet for the other new programs Eastern State has to offer.

#### **Cellblock 4: Performing Arts Center**

Cellblock four, oriented north to south is the ideal location for a performing arts center that can host concerts and other events in all seasons. Seating extends beyond the footprint of cellblock four and the perimeter wall, bringing the performance out to the street. A performing arts space completely open to the community can function as a device for community bonding and an increasingly rich performing arts culture that everyone can participate in.

Arts and culture is a major driver of economic activity in Philadelphia, generating \$4.1 billion in total economic impact, \$1.3 billion in household income, \$224.3 million in state and local taxes, and 55,000 full-time equivalent jobs (Greater Philadelphia Cultural Alliance).

Adding a significant performing arts space, at a crossroads location can provide significant cultural and economic benefits.

#### **Cellblock 5: Nature Center**

Outside of Fairmount Park, Wissahickon Creek, and Northeast Philadelphia, much of the city, especially many neighborhoods north of center city lack access to adequate vegetation even if green space is available. According to a Philadelphia Tree Canopy Assessment conducted by

the City of Philadelphia and University of Vermont, Philadelphia lost over 1000 acres of tree canopy, equivalent to a 6% loss between 2008 and 2018 (Tree Canopy Assessment Philadelphia, PA).

Human beings belong near nature, as access to vegetation is an important marker of happiness. Cellblock five, two stories in height, is to become a nature center and improve the city's access to plant life. Trees, plants, and water features exist in a microclimate sealed from the elements by a glass roof, replacing the existing degrading roof. Sections of the interior of cellblocks are cut out, with nature filling in the gaps as this former house of incarceration slowly gets taken over by nature. The lush forest emanating from inside cellblock five expands into the adjacent cellblock yards, a nod to the period after Eastern State's closing when the entire complex became a forest. Lastly, ponds surrounding cellblock five cool the surrounding area with evaporative cooling and provide relief against the urban heat island effect which plagues many underprivileged areas of Philadelphia.

#### Cellblock 6: A Place for the Individual

The compartmentalization of Eastern State, isolating in nature can be leveraged to provide spaces for internal reflection and inner peace. Cellblock six includes individual and group spaces for meditation, yoga, and other exercises of the mind and body. This space, unique

in this project being centered around the individual, is designed with the belief that mental health is the foundation for success and happiness in all other aspects of one's life.

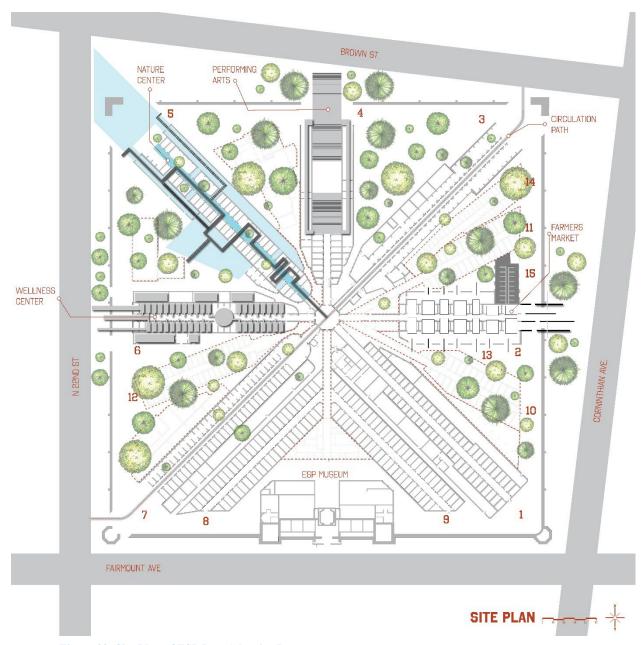


Figure 32: Site Plan of ESP Post Adaptive Reuse

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