fort Migglin

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DISCLAIMER

This report is the product of a seminar studio under the guidance of Fon S. Wang, A. I. A., in the Graduate Program in Historic Preservation at the University of Pennsylvania School of Design.

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VOLUME ONE

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O1 INTRODUCTION

Situated on the outskirts of Philadelphia, Fort Mifflin is a National Historic Landmark (NHL) and relic of military history with the ability to transport visitors to another time, despite its location between the Philadelphia International Airport and industrial development on the Delaware River (Figure 1.1). Fort Mifflin played a crucial role in the fight for independence from the British and following the American Revolution, remained in service to the United States until 1954. The fort first opened to the public in 1969. As a historical site owned by the City of Philadelphia, Fort Mifflin's continued existence and successes have primarily depended on the personalities and dedication of its administers: First, the Shackamaxon Society that formed in 1986, and since 1986, Fort Mifflin on the Delaware (FMOD). To remain in operation, Fort Mifflin has relied on its small staff, dedicated board and volunteers, and personal relationships, like the long-standing one between the site and its neighbor, the Army Corps of Engineers.

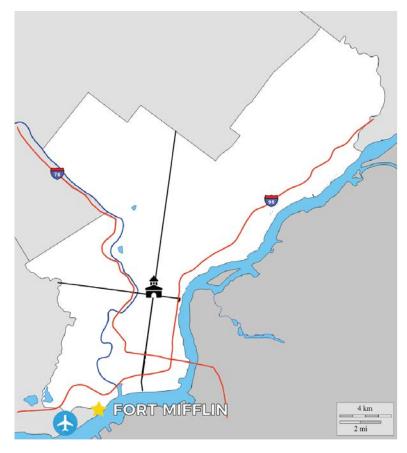


Figure 1.1 Fort Mifflin in Philadelphia, Pennsylvania. Faced with the day-to-day challenges of operating a historical site that is underfunded and lacks the notoriety of similar-scale sites in Philadelphia, Fort Mifflin on the Delaware, like its predecessor, has failed to develop organizational and financial sustainability, leaving the fort in a precarious position. Additional challenges include, Fort Mifflin's paradoxical location, isolated and seemingly remote, yet located within the City of Philadelphia and surrounded by dense, industrial development, its status as a lesser-known historic site, a large building stock suffering from deferred maintenance, a landscape that is overwhelming to maintain and suffers from poor drainage, threats to both the building and the landscape from resulting from climate change, and a lack of sustainable partnerships and support for Fort Mifflin.

Six students from the University of Pennsylvania were tasked with developing this Preservation Plan for Fort Mifflin. Over the course of a semester, we spend time walking the site, digging through archival documents to learn about Fort Mifflin's incredible history, sought out board members, city officials, and other stakeholders for interviews, and most importantly, worked to develop implementable solutions to the fort's many challenges. The result of that effort is this three-vol-ume series: our plan that strives to enhance Fort Mifflin's organization-al sustainability, diversity of engagement, and physical sustainability (Volume I: Preservation Plan), proposed projects developed by individual team members (Volume II: Individual Projects), and a compilation of the research, investigations, and thought processes that informed our methodology (Volume III: Background Analyses).

02 Statement of Significance

Fort Mifflin's nearly 250-year-long history and 183 years of service to the United States tell a story of endurance and perseverance. The fort is a gateway to diverse historical narratives that parallel the course of our nation's history from inception to the present day. A highly intact, eighteenth-century military fortification that once occupied Mud Island in the Delaware River, today, Fort Mifflin is situated on the river's west bank in a densely developed, industrial section of southwest Philadelphia. The fort is one of the last remaining examples dating to the nation's seacoast and harbor defense system, referred to as the "First American System" of fortifications (1794-1800), though its development dates to the 1770s. The site bears a direct connection to the nation's political and military history. Investigation of the site illuminates our understanding of defense, military strategy, eighteenthand nineteenth-century construction techniques, and weaponization.

Beginning in 1771-72, British forces erected the tenaille-plan (star) fortification until American forces occupied the unfinished site in 1775. In 1777, Fort Mifflin played a crucial role in Philadelphia's defense network during the American Revolution, when in October and November, the fort withstood the greatest bombardment of the war. African American soldiers, serving before legislation passed in 1778 legally allowed them to, fought alongside Fort Mifflin's white soldiers to frustrate British forces attempting to reach Philadelphia. Left leveled by the bombardment, and subsequent fires set by the Americans as they retreated, Fort Mifflin became a focal point of the First American System in 1794.

The US government deployed French military engineers and artillery experts, including Pierre Charles L'Enfant, to rebuild Fort Mifflin, largely resulting in its current architectural form. Throughout the nineteenth and first half of the twentieth centuries, Fort Mifflin underwent numerous building campaigns, interspersed with periods of neglect and abandonment, which often coincided with changes military technology and approaches to defense, new uses for the fort, and responses to major conflicts. The periods of neglect, which resulted in a lack of maintenance, have not diminished Fort Mifflin's physical presence. A masterpiece of military engineering, Fort Mifflin is surrounded by an original moat and retains an intact collection of Federal-period brick buildings, including the L'Enfant-designed Commandant's House, and mid-nineteenth-century defensive and utilitarian structures ranging from barracks and officer's quarters to subterranean casements.¹ Despite modern intrusions, such as the Philadelphia International Airport (PHL) and industrial development along the waterfront, standing within the walls of Fort Mifflin surrounded by an intact greenspace is an immersive experience. These features of Fort Mifflin enhance the historic site's educational and interpretive potential and its recreational possibilities. Fort Mifflin also retains its connection to the Delaware River.

Fort Mifflin has received multiple historic designations. In 1956, Fort Mifflin was listed in the Philadelphia Register of Historic Places.² Then, in 1969, Fort Mifflin was listed in the National Register of Historic Places (NRHP) as a historic district.³ That year, the neighboring Fort Mifflin Hospital, located outside of the fort's walls but directly associated with the district, was also individually listed in the NRHP.⁴ Most notably, in 1970, Fort Mifflin was designated a National Historic Landmark (NHL); the Fort Mifflin Hospital was included in this designation.⁵ Both the NRHP and NHL documentation identified the historical, engineering, military, and architectural significance of Fort Mifflin and Fort Mifflin Hospital. Furthermore, in 1937 and 1969, Historic American Buildings Survey (HABS) recordation was carried out for Fort Mifflin.⁶

¹ Dorwat, 4.

² Philadelphia Historical Commission, "Philadelphia Register of Historic Places (no official addresses)," August 2017, accessed September 1, 2017, http://www.phila.gov/ historical/PDF/Phila%20Register%20no%20addr.pdf.

³ National Register of Historic Places, Old Fort Mifflin, Philadelphia, Philadelphia County, Pennsylvania, #70000554.

⁴ National Register of Historic Places, Fort Mifflin Hospital, Philadelphia, Philadelphia County, Pennsylvania, #69000157.

⁵ National Register of Historic Places, (National Historic Landmarks), Fort Mifflin, Philadelphia, Philadelphia County, Pennsylvania, #70000554.

^{6 &}quot;Fort Mifflin, Mud Island, Marine & Penrose Ferry Roads, Philadelphia, Philadelphia County, PA," Survey (photographs, measured drawings, written historical and descriptive data), Historic American Buildings Survey, National Park Service, U.S. Department of the Interior, 1979, from Prints and Photographs Division, Library of Congress (HABS PA,51-PHILA,111-; http://www.loc.gov/pictures/collection/hh/item/pa0682/ accessed September 1, 2017.)

03 Fort MIFFLIN: Brief History

FORTIFICATIONS ON THE DELAWARE

Prior to Fort Mifflin's construction on Mud Island, the Delaware River's convergence with the Schuylkill River was a desirable location for numerous fortifications erected by the Dutch, Swedish, and British.

Interested in fur trade in the region, the Dutch West India Company constructed the first fortification Fort Nassau in 1626, on the east bank of the Delaware River, then referred to as the South River, opposite the mouth of the Schuylkill River.¹ Among the fortifications in the region, while representing Sweden's interests, Director-General of the New Netherlands Peter Minuit constructed Fort Christina in 1638, and Fort Nya Korsholm, 1643.² After abandoning Fort Nassau in 1651, the Dutch West India Company then erected Fort Casimir the same year, which the British captured in 1664.³ Despite their interest in the Delaware River as early as 1610, the British were occupied by political and religious unrest and civil war until the monarchy was restored in 1664, when they turned their attention to the region, challenging the Dutch and gaining control of the Delaware River and other regions in the northeast.

With control over the territory between the Delaware and Hudson Rivers, the Duke of York presented the land to two loyalists, Lord John Berkley and Sir George Carteret. Berkley eventually sold his property, which "comprised most of the southern half of present-day New Jersey," to Quaker entrepreneurs.⁴ When feuds and debts prevented the property's development, a group of Quaker businessmen led by William Penn assumed trusteeship of the land and Quaker settlements began to emerge on both shores of the Delaware River. Consistent with their beliefs, these settlements lacked forts, military garrisons, and defensive works. Years later, when direct threats to the region from the Spanish and French emerged in the 1740s, Philadelphia's local government, dominated by Quaker leaders, remained staunchly opposed to constructing a fort of raising a militia. In response to the

¹ Jeffery M. Dorwart, Fort Mifflin of Philadelphia: An Illustrated History (Philadelphia: The University of Pennsylvania Press, 1988), 7.

² Dorwart, 8.

³ Ibid.

⁴ Ibid., 9.

French and Indian War's outbreak in 1754, military engineer Elias Meyer developed plans for a fort on Mud Island in 1757-58, which was never erected.⁵

THE FORT ON MUD ISLAND

When the war ended in 1763, a portion of the British troops serving in the colonies were garrisoned there for the first time, primarily to collect duties for the British government. In order to enforce these laws, the British and colonial governments began strengthening the colonies' coastal and harbor fortifications, paying specific attention to Philadelphia. While it was the largest port in the 1760s, a movement against the British economic policies was also emerging in Philadelphia. Pennsylvania Governor John Penn requested that British General Thomas Gage "send his best military engineer to Philadelphia to build a Fort on Mud Island on the Delaware River to serve as a base for regulating local trade."6 In April 1771, Gage assigned Captain John Montresor to the task.

Montresor surveyed Mud Island, a low-lying island in the Delaware River, along with more desirable locations for a fort, but may have selected Mud Island believing this is what the Pennsylvania Provincial Assembly preferred. Due to Philadelphia's large population (approximately 40,000 residents), Montresor initially proposed a fort with expensive defensive features that the state assembly rejected. The assembly then approved Montresor's new plans for a £15,000-star fort that "could mount thirty-two cannon, four mortars, and four royal howitzers, and barracks to house 240 artillerymen and 160 musketry."⁷ Concerned about building on ^{5 Ibid., 13.} 6 Ibid. the poorly drained muddy terrain, Montresor later requested additional funds to drive piles in Mud Island which the Pennsylvania Assembly denied.

Montresor left plans for the fort with Philadelphia's master stonemason John Palmer and by 1772, Palmer completed an irregularly shaped stone wall on the island's southern and eastern corners facing the Delaware River. Engineering issues during construction forced Montresor to return to Philadelphia and by November 1773, work on the fort ceased altogether due to weather conditions. Speaking to the assembly, Governor Penn noted the challenges posed by the unstable condition of the land, insinuating that the project would require additional funding. The following year, the assembly refused to approve any additional funding for the project and British forces stopped their work at Fort Mifflin. By this time, the taxes and duties levied by the British were rising and the Pennsylvania Provincial Assembly was no longer concerned with defense against a foreign enemy, they were concerned with resisting British control and the British military forces already garrisoned in the colonies.8

FORT MIFFLIN

In June 1775, the Continental Army was formed. At this time, the Americans' defense strategy centered on defending the colonies from sea and by defending the coastlines and harbors. American forces occupied unfinished Fort Mifflin in late 1775 and construction resumed. Fort Mifflin later played a crucial role in British-occupied Philadelphia's defense network during the war. In November 1777, while George Washington's army safely retreated to Valley Forge, Fort Mifflin withstood the greatest 8 Ibid., 16.

⁷ Ibid., 14.

bombardment of the war. White soldiers and African American soldiers, serving before legislation passed in 1778 legally allowed them to, held off and frustrated British forces attempting to reach Philadelphia via the Delaware River. Experiencing a tremendous loss of life, the American's ultimately abandoned on November 16, 1777. However, this display of strength delayed the British, influencing the American victory at Valley Forge, which ultimately changed the course of the American Revolution. The role and involvement of African Americans during the events at Fort Mifflin also convinced Washington that they should be recruited.

Left leveled and destroyed by the bombardment, and subsequent fires set by the Americans as they retreated, Fort Mifflin became a focal point of the First American System in 1794. With funding from Congress, the US government deployed French military engineers and artillery experts, including Pierre Charles L'Enfant, to rebuild Fort Mifflin, largely resulting in its current architectural form. Throughout the nineteenth century and the first half of the twentieth century, Fort Mifflin underwent numerous repair and building campaigns, which often coincided with changes in the US Military's approach to coastal defenses, advances in weaponry and military technology, new uses for the site as its defensive role declined, and notable events and conflicts, including the Civil War, Spanish American War, World War I, and World War II. Often, politicians, engineers, and local businessmen determined Fort Mifflin's standing, impacting the site's changing use and reassignment.

The site transitioned from a defensive fortification

to a military prison and a recruiting station for African American soldiers during the Civil War. By the early twentieth century, interest in Fort Mifflin as a historical destination first emerged and military and history buffs began visiting the site. Later, the site was used for ammunitions storage during World War I and II. Before the armed services were integrated, progress newspapers touted the importance and effectiveness of the 76th Coast Artillery, an all African American regiment stationed at Fort Mifflin during World War II. The site remained in operation until the Federal Government decommissioned the fort from service in 1954.

In 1956, Fort Mifflin was added to the Philadelphia Register of Historic Places.⁹ Despite the National Park Service's doubts regarding the fort's historical significance in previous decades, in 1969, Fort Mifflin and the Fort Mifflin Hospital, a nearby building associated with the fort, were both individually listed in the National Register of Historic Places (NRH-P).¹⁰ The following year, Fort Mifflin was designated a National Historic Landmark (NHL).¹¹ Since 1977, the City of Philadelphia's Department of Parks and Recreation has administered Fort Mifflin, while Fort Mifflin on the Delaware (FMOD), a non-profit organization governed by a Board of Directors, has managed the fort since 1986.

Currently, the City of Philadelphia retains ownership of the 40.8-acre parcel that contains the fort itself,

⁹ Philadelphia Historical Commission, "Philadelphia Register of Historic Places (no official addresses)," August 2017, accessed September 1, 2017, http://www.phila.gov/historical/PDF/

Phila%20Register%20no%20addr.pdf. 10 National Register of Historic Places, Old Fort Mifflin, Philadelphia, Philadelphia County, Pennsylvania, #70000554.; National Register of Historic Places, Fort Mifflin Hospital, Philadelphia, Philadelphia County, Pennsylvania, #69000157.

¹¹ National Register of Historic Places (National Historic Landmarks), Fort Mifflin, Philadelphia, Philadelphia County, Pennsylvania, #70000554.

while the neighboring US Army Corps of Engineers owns a 1.38-acre parcel that comprises the Fort Mifflin Hospital and parking for Fort Mifflin visitors (Figure 3.1 and Figure 3.2).¹² Since the eighteenth century, the landscape surrounding Fort Mifflin has

12 City of Philadelphia, "Parcel Explorer," accessed September 26, 2017, https://secure.phila.gov/parcelexplorerauth.

changed dramatically; the area is primarily zoned for industrial and commercial uses. In addition to the US Army Corps of Engineers, neighbors included the Philadelphia International Airport, Sunoco Incorporated, and the United Parcel Service (UPS).



ARMY CORPS OF ENGINEERS PROPERTY

BOUNDARY, DEFINED BY FORT MIFFLIN STUDIO

BOUNDARY FOR THE VISIT OR EXPERIENCE

Figure 3.1 and 3.2

Boundaries of land ownership illustrated on the left; by comparison, the area of the fort that is accessible to visitors is indicated on the right.

04 Character Defining Features

At a building scale, character is defined as the "visual aspects and physical features that comprise its appearance," while character-defining elements include the "overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment." Identifying the gualities that impart a historic property's visual character will aid in determining which elements need to be preserved to maintain this visual character. This information can be used as a framework for decision-making, informing maintenance decisions and the tolerance for changes and alterations to the character-defining features. Due to the scale and complexity of Fort Mifflin, the studio team developed five broad categories that encompass all character-defining features: (1) Architectural/Engineering (2) Landscape (3) Setting (4) Evolution of Use (5) Intangibles. Deviating from the standard definition, the studio team also created the category Intangibles to capture character-defining features that are not visual or physical qualities of the property.

Fort Mifflin's appearance today is largely representative of building campaigns and changes to the site carried out between 1778 and 1882. The fort's visual character is the result of long-standing approaches to fortification, input from various architects and engineers, available materials, political influences, advances in weaponry, and changing defensive strategies in the US.

Character Defining Features

Architectural/Engineering

Buildings

- Historic function dictates building form and siting within or outside of the fort's walls
- Rectangular-, U- and square-plan footprints
- Lack of additions altering these original footprints (i.e. kitchen addition to Fort Mifflin Hospital is rare on the site)
- One-to-two stories in height
- Gabled, pyramidal, and hipped roofs
- Symmetrical fenestration patterns
- Gabled Dormers
- Slate and wooden shingles
- Wood cornices
- Red common- and Flemish-bond brick walls
 Vallaw Daint and Limawach (Building Extari
- Yellow Paint and Limewash (Building Exteriors), believed to stave off yellow fever during the nineteenth century
- Timber truss construction
- Covered porches
- Wood and iron railings
- Colonnades

Walls and Ramparts

- Irregular form that partially adheres to tenaille (star) plan
- Sited towards Delaware River to defend enemy approach from the southeast
- Wall (ramparts) height: ca. 11 feet
- Battering
- Bastion formation
- Demi-Bastion formation
- Scarp
- Terreplein
- Ashlar gneiss base
- Red Flemish-bond brick
- Red brick buttresses
- Embrasures
- Gneiss quoins
- Stone quarter round belt courses
- Sally ports: emi-elliptical and round-arched sally ports for access; Gates in sally ports with heavy, iron strap hinges; Stone keystones; Rowlock brick courses

- Wood columns
- Brick, round-arch openings (Commandant's House and Arsenal)
- Red brick pilasters (Commandant's House)
- Wood-frame, double-hung windows
- Thin muntins and mullions
- Three-over-six, eight-over-twelve, and twelveover-twelve are typical
- Wood board-and-batten doors
- Wood paneled doors with multi-light openings
- Operable wood paneled shutters protecting window and door openings
- Wood door and window surrounds
- Ovolo-trimmed surrounds
- Wrought iron strap hinges and hardware
- Simple, refined ornamentation
- Gneiss sills (doorways)
- Brick fireplaces (Interiors)
- Wood floors (Interiors)
- Paneled wood doors (Interiors)

Casemates and Magazines

- Situated within walls (ramparts) and on site (earth covered) [Casemates]
- Situated on site (earth covered) [Magazines]
- Stone wall construction
- Red brick barrel vaults
- Red brick round-arch openings
- Open floorplans
- Whitewashed walls (protect brick, increase visibility)
- Red brick, wooden, and dirt floors
- Embrasures provide light (Casemates)



View north toward the Artillery Shed (left), Commandant's House (center), and Soldier's Barracks and Commissary (right) from the wall's grass-covered parapet. Source: Studio Team. 2017.



View northeast toward the Soldier's Barracks (left) and the Commissary (right) from the parade ground. Photo by A. Hita, 2017.



View northwest toward the Artillery Shed (left), Blacksmith Shop (center), Commandant's House (right) from the terreplein. Photo by J. Giganti, 2017.



View northwest toward the Officer's Quarters. Photo by J. Giganti, 2017.



View south toward the Arsenal's facade and north (side) elevation. Photo by A. Hita 2017.



View northwest toward the Commandant's House. Photo by A. Hita, 2017.



Interior of the Commandant's House. Photo by J. Giganti, 2017.

Brick fireplace in interior of the Commandant's House. Photo by J. Giganti, 2017.







View northeast toward the Hospital Building's facade. Photo by A. Hita, 2017.

View northeast toward the colonnade of streamlined wood columns and covered porches on the Fort Mifflin Hospital building's facade. Photo by J. Giganti, 2017.



View northeast toward the Commissary. Note the common-bond brickwork, paneled, wooden shutters on the windows and doors, the small, multiple lights on both windows and doors, and the board-and-batten doors (left). Photo by J. Giganti, 2017.



Left, view northeast toward a wood-frame, double-hung, twelve-over-twelve window flanked by paneled wooden shutters on the Commissary's facade.

Below, wrought iron strap hinges on the Commissary's board-and-batten door, the doorway's gneiss sill, and slate tiles at the ground. Photos by K. Britt, 2017.



View northwest the Blacksmith Shop's board-andbatten door (interior face). Photo by K. Britt, 2017.



View northwest toward the Blacksmith Shop's paired wood-frame, double-hung, three-over-six light windows flanked by wooden shutters. Photo by J. Giganti, 2017.



View northwest toward the exterior face of the fort's walls, east corner. Note battered form, Flemish-bond brick, ashlar gneiss base, quoins, and belt courses, embrasures, and overgrowth at parapet. Photo by A. Hita, 2017.



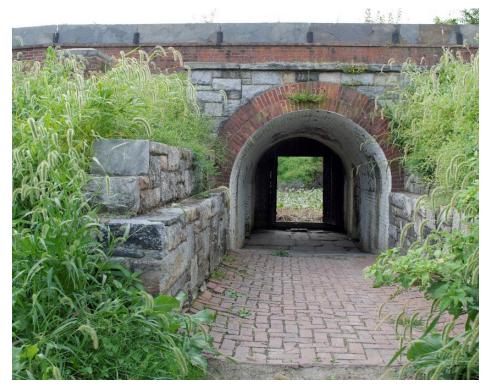
View east toward casemate entrances flanking the East Sally Port and stairs that provide access to the terreplein and the wall's parapet. Photo by J. Giganti, 2017.



View south toward stepped brick wall with the buttresses and a portion of a terreplein flanking the East Sally Port. Photo by J. Giganti, 2017.



View northeast toward the exterior face of the fort's battered walls, which are primarily clad in ashlar gneiss here. Photo by J. Giganti, 2017.



View northwest toward West Sally Port from inside of the fort. Photo by J. Giganti, 2017.



View east toward the earthen-covered East Magazine. Photo by J. Giganti, 2017.



Interior of barrel-vaulted Casemate with built-in ovens and stoves on end wall. Photo by S. Gdula, 2017.



Interior of barrel-vaulted Casemate 5, located within the fort's walls. Note embrasures that provide natural light and ventilation. Photo by J. Giganti, 2017.

Interior of the East Power Magazine's (Demilune). Photo by J. Giganti, 2017.



Character Defining Features

Landscape

- Acknowledgement that the landscape is comprised of multiple, integrated "zones":
- Greenspace surrounding hospital; Demilune;
- Intact moat and pathway around fort;
- Interior of fort: parade grounds and multi-tiered landscape;
- High and Mortar Batteries and surrounding forested area on property; and the Delaware River
- Lack of historical precedence for landscape's appearance due to periods of neglect
- Circulation patterns dictated by fort's original function and subsequent uses
- Low-lying site with water infiltration
- Direct connection to Delaware River and shoreline on property
- Fort Interior
- Open parade grounds
- Multi-tiered landscape within walls due to scarps, earth-covered casemates, terreplein
- Location of buildings and features within fort dictates views
- Drainage channels on grounds and in walls (ramparts)
- Slate and red brick paths
- Remnants of weaponry on site; including Gun emplacements and torpedo cabels
- Mature trees on Demilune
- Wooden stairs accessing terreplein
- Red brick retaining walls



View across Fort Mifflin's moat, which is spanned by a footbridge, toward the East Sally Port. Photo by K. Britt, 2017.



Left, view southeast toward the footbridge that spans the moat and accesses the East Sally Port, the Demilune with powder magazines, the Delaware River from the atop the wall's grass-covered parapet. Right, view northeast toward the moat, foreground, and the Fort Mifflin Hospital building and its surrounding green space from the footbridge that accesses the Easy Sally Port. Photo by K. Britt, 2017.



Left, a view southeast toward the earthen covered West Magazine located within the fort. Right, small channels for drainage within the fort Photo by K. Britt, 2017.



View northwest toward the fort's interior, open parade ground flanked by the Officer's Quarters and Soldier's Barracks (right). Photo by K. Britt, 2017.



Above, view southeast toward Fort Mifflin's dock on the Delaware River from the Demilune. View northwest toward Fort Mifflin from the Demilune, showing the property's relationship to the Delaware River. Photo by K. Britt, 2017.





View southeast to the river from the elevated terreplein. Below, gun emplacements located on the terreplein. Photo by K. Britt, 2017.





Remnants of a brick wall on the never completed High Battery, which is located outside of the fort's walls on the southeast end of the property. Photo by S. Gdula, 2017.

> Entrance to a powder magazine on the never completed High Battery, which is located outside of the fort's walls on the southeast end of the property. Photo by S. Gdula, 2017.



Setting

- Due to walls (ramparts) and mature tree stands, historically significant views within the site and to the Delaware River are retained and protected
- Connection and proximity to Delaware River
- Retention of open greenspace despite modern intrusions
- Waterfowl and wildlife
- Modern intrusions diminish integrity of setting and feeling, but create a unique experience that is indicative of development that has occurred surrounding the fort (i.e. the ability to watch plane's landing overhead)
- Surrounding commercial and industrial development is paradoxically viewed as intrusive AND as assisting Fort Mifflin's preservation due to the isolating factor of this development

Intangibles

- Broad period of significance
- Perpetual underdog narrative that has translated to a managerial and operational underdog narrative
- Management structure: city owned and nonprofit operated
- Perseverance of the fort and its continual response to the call to action throughout multiple periods in history
- Cycles of neglect impacting historic fabric and appearance of site that impart age value

Evolution of Use

- Changing use of the site, historically
- Impact of these changing uses on the site's development and circulation of people and goods (i.e. munitions)
- Flexibility of the greenspace, buildings, and casemates that has lent themselves to multiple uses and programming (in recent years)



View northwest from the wall's parapet, showing the proximity of the airplanes that fly overhead to the Fort Mifflin. Photo by J. Giganti, 2017.

View southeast from the wall's parapet showing Fort Mifflin's proximity to the Delaware River. Photo by K. Britt, 2017.



05 S. W. O. T. Analysis

A S.W.O.T. analysis is a structured planning method intended to identify strengths, weaknesses, opportunities, and threats for organizations, individuals, and business ventures to evaluate potential and limitations relevant to the entity being analyzed. The team viewed strengths and weaknesses as those factors that are current, and opportunities and threats as things that might affect the site in the future. After detailed research into the history and current situation of the site and its management, as well as at least one site visit, the Fort Mifflin studio team came together to brainstorm entries for these categories. An extra category was created for guestions the team wanted to address, which were answered over the course of the project. Every suggestion that was raised was added to a list in each category, resulting in lists up to thirty entries long. The team then was allowed five votes per category for the entries they thought were the most pressing and relevant. All entries that received votes were analyzed and some that contained overlapping themes were combined to streamline the first draft. For instance, "rehabilitate all spaces" and "rehabilitate Commandant's house" were combined into one all-encompassing entity. The streamlined entries were then sorted into subcategories based on common themes, for instance "rich history", "historic building stock", "good amount of documentation", and "network of regional historic sites" were assigned in the "Historical" subcategory of strengths.

There were a few instances where entries were voted into multiple categories due to their ambiguous nature. For example, the airport was allocated into strengths, weaknesses, and threats for a variety of reasons. It is considered a strength due to the fort's proximity to the airport because it will benefit from any climate change mitigation effort spearheaded by the airport, yet it is considered a weakness due to the proximity of the landing runway to the fort. This proximity creates a constant audible distraction, as well as a threat due to the possibility for airport expansion closer to Fort Mifflin property. Possible expansions could result in truncated roads and increased isolation from the city and surrounding neighborhoods. It is also important to note that the S.W.O.T. of the site that has been laid out here are those identified by the studio team, and these might vary due to differences in opinion based upon who is interpreting the site. For instance, a reenactor

might find the planes to detract from the site's integrity, however a child at the site might enjoy watching the planes flying overhead more than the historic interpretation. Despite these complicated relationships, the S.W.O.T. provided insight and direction for the Preservation Plan Framework (in this volume) and subsequent projects and recommendations made in Volumes I and II.

STRENGTHS

The studio team has placed Fort Mifflin's strengths -fall into three categories: physical, historical, and social. Fort Mifflin's physical strengths include the extant historical building stock, its proximity to the Delaware River, the Army Corp of Engineers, and the Philadelphia International Airport, and the site's flexibility for interpretation. The studio team views the proximity to the Army Corps as a physical strength because for decades, they have shown a strong commitment to the fort. Not only have they chosen to have events at the fort, but the Army Corps frequently offers to help with physical maintenance and provide a broad range of engineering expertise.

Proximity to the Philadelphia International Airport may seem counterintuitive as a strength and this complex relationship is highlighted in other categories of the SWOT analysis. However, like Fort Mifflin's other industrial neighbors, the airport has discouraged development of riverfront land, discouraged intruders to some extent, and preserved the fort by benign neglect. The airport has also highlighted the fort's history in terminal exhibits.

Fort Mifflin's ample green space and building stock makes the site flexible for historical interpretive

programming and for contemporary uses. There is ample space for gathering and exhibition events, including re-enactments on the parade ground, and a variety of interior and transitional spaces.

As expressed throughout this supplemental report, Fort Mifflin has a rich history. Although its notoriety is primarily derived from the fort's defensive role during the Revolutionary War and its noble attempt to stall British forces, Fort Mifflin embodies a broader historical narrative. The fort can be placed in the context of other colonial era and Revolutionary War sites in the region including Cliveden in Germantown; Paoli Battlefield, Malvern; Valley Forge, King of Prussia; and Fort Mercer across the Delaware River in New Jersey. Guarding one of the nation's most important ports, the US government made the fort a key element in East Coast defense system decades after the Revolutionary War period.

The story of Fort Mifflin re-establishes the racially diverse continental army, and later the national military. This history is not only embodied in its physical stock--ramparts, walls, and vaulted spaces--but has been captured in extensive documentation. Beyond its connection to US military history, Fort Mifflin holds a place in the greater context of the Delaware River region's settlement and development.

These physical and historical strengths connect directly to Fort Mifflin's s social strengths, especially as a beloved place among dedicated, passionate volunteers and Fort Mifflin on the Delaware (FMOD)'s board members. Fort Mifflin has provided a meaningful gathering place for regular visitor groups such as the Boy Scouts of America, local school groups, fort and military buffs and living historians, and more recently, Philadelphia's Renaissance Fair. In that regard, it is serves as a valuable tool for teaching Philadelphia and the nation's history and the ideals of perseverance, dedication, and sacrifice. Understanding Fort Mifflin's complex history can help illustrate some of the contradictions and difficulties of the American Revolution such as the concept of freedom in a land of legal slavery.

Despite its location in a primarily industrial section of southwest Philadelphia, Fort Mifflin can capitalize on visibility, particularly from the air and water. Although, the fort suffers from poor accessibility issues and its larger industrial landscape, the site is easily accessed by car from major regional highways.

Perhaps Fort Mifflin's strongest attribute is its dedicated management that is open to change, experimentation, and innovation. The executive director has been a willing and enthusiastic participant in the process of this report and is clearly committed to addressing challenges.

WEAKNESSES

Fort Mifflin's weaknesses can be categorized into four thematic categories: organizational structure, visibility, location, and visitor experience. Management structures at the site and internal attitudes can diminish the capabilities of the director and staff to effect positive and meaningful change at the site. Signage and advertisement in the vicinity lacks clarity thereby diminishing communication. Fort Mifflin suffers due to its location in a popular industrial zone. Its primary neighbor, the Philadelphia International Airport, perpetually threatens intrusion and demolition. Other industrial uses detract from the historic environment and diminish the integrity of the setting. For casual visitors at the site, Fort Mifflin lacks clear activities and direction. By improving elements of the organizational structure, visibility, location, and visitor experience, Fort Mifflin will attract more visitors, and become a more successful site.

The weaknesses of Fort Mifflin's organizational structure include lack of support from the city, lack of maintenance, underdog attitude, and a lack of vision. Fort Mifflin is owned by the City of Philadelphia Parks and Recreation, but receives scant funding or attention from them. The site management has to stretch meager funds, in order to keep maintenance and operations afloat. Due to limited resources, the director and staff have difficulty keeping the site in a preserved condition. Other than communication with the Seaport Museum, the executive director does not seek assistance from other pertinent historic sites. Currently, the director is so burdened by applying for grants, completing projects, organizing volunteers, and planning events that she does not have the chance to plan for the fort's next steps. Fort Mifflin's lack of a vision hinders positive changes for the site, and increased engagement.

Fort Mifflin lacks clear visibility from public roads, due to poor signage and lack of connections to other contemporary sites. There are no signs advertising Fort Mifflin on Route 95 which is the largest road near the fort. Island Avenue is right off Route 95, and leads directly to Fort Mifflin. If the fort connected with other historic sites, particularly war battlefields, they would have a good chance of increasing their marketing. Without these connections, Fort Mifflin misses out on connecting visitors to the Philadelphia area who are interested in the American Revolution and history.

Unfortunately, Fort Mifflin cannot control its location. Industrial uses developed around the fort to exploit the Delaware River for shipping and goods. In the 1940's, airport planning commissions identified the wetland area near Fort Mifflin as a prime location for developing the Philadelphia International Airport. Currently, the airport property is about one thousand yards from Fort Mifflin's boundary and plans for further development are recurring. In addition to the Philadelphia Airport, Southwest Water Pollution, the Army Corps of Engineering, and the Sunoco Pipeline are also in the immediate proximity of Fort Mifflin.

Fort Mifflin greatly lacks engaged, interactive, day to day visitor experiences. Re-enactment events and speak easies held in the casemates are popular. This property is not ADA accessible, which may limit differently abled groups from visiting. When people arrive to the fort, there is unclear signage as to where to go first. Admission is on the second floor of the hospital, which is referenced by a small sign which is hard to see from a distance. Arrows and directional signage will help guide visitors to Fort Mifflin.

OPPORTUNITIES

The opportunities for Fort Mifflin can be grouped thematically into three categories: Military History; Education and Experience; and Volunteer and Local Engagement. Through development and diversification of these three broad categories Fort Mifflin can increase their stakeholder base and better establish themselves as a renowned center for interpretive and historical experience in the Philadelphia area.

Due to its history and location, Fort Mifflin has the opportunity to participate in a couple of major thematic and interpretive spheres. These include the Revolutionary War effort in Philadelphia, the greater system of defenses on the Delaware River, historical sites in Philadelphia, or riparian historical sites along the Schuylkill and Delaware rivers. Fort Mifflin has already developed a relationship with the Seaport Museum, consulting on a shared exhibition that director Beth Beatty hopes will become part of Fort Mifflin in the future. But relationships with other local museums are few and far between. An improved relationship between these museums and sites could improve visibility for Fort Mifflin by explicitly connecting it to sites Valley Forge National Historical Park, Brandywine Battlefield Historical Park, and the Museum of the American Revolution. Such connections could also lead to similar relationships as that with the seaport in which Fort Mifflin could share and trade exhibition materials. The site could have access to a more fresh and diverse interpretative sets and items without having to hire or expand curatorial staff. All of these elements, the word of mouth and strengthen its reputation one of Philadelphia's iconic historical sites.

Fort Mifflin certainly capitalizes on its major historical moment, the siege of Fort Mifflin in 1777. And while this is a pivotal and little known battle in the American Revolution, it is not so iconic that it precludes other interpretations. Valley Forge must interpret the triumphs of George Washington; Fort McHenry in Baltimore is immortalized for protecting the famed "Star Spangled Banner" in spite the voracious bombardment on the part of the British, and can only be interpreted as such. For lesser known sites, it is still easier to rely on a particular battle or short period for the sake of simplified programming. Several smaller fortification sites do this, but to their detriment. Fort Mifflin can creatively utilize its long history, resources, and location to facilitate interpretation of diverse topics within the subjects of military history, environment, technology, and regional history. Some elaboration on these topics follows.

Military History, Engineering: The development of military technology and coastal fortifications in the eighteenth and nineteenth centuries are part and parcel to the development of the site between the 1790's, with Pierre L'Enfant's plan, and further modifications in the mid-nineteenth century in the Second and Third Systems of fortification building. This would also provide an opportunity to connect to other fortifications in the Delaware River region thematically and through contact with other sites, even though are not part of the American Revolution narrative. Exhibits that focus on the construction of the fort, the methods for construction, and the advantages of these technologies in combat could bridge historical and STEM-related themes.

Environment: As the only public green space with access to the Delaware River in Southwest Philadelphia, Fort Mifflin could utilize their location to interpret environmental topics, such as riverine ecosystems, the effects of industrial pollution and urban development, and climactic changes. Fort Mifflin should engage the John Heinz NWR on these issues as an equal player despite its comparatively smaller size. A partnership between the two could creatively combine wetland resources to more effectively interpret these issues.

Archaeology and Craft: Historic archaeology and craft production are topics that are both well within the existent resources of the site and, in reviewing the recent programming at Fort Mifflin, could stand to be better developed. These are particularly interesting options since they involve activity and visitor engagement to a degree that is not achieved by exhibitions alone.

Pending approval by necessary regulatory bodies, archaeological excavation is one possible area of future investigation at Fort Mifflin. Past archaeological investigation conducted in the early twentieth century by G. Edwin Brumbaugh helped inform mid-twentieth century restorations. Likewise, excavations conducted by Philadelphia-based Materials Conservation Co. in 2007 aided in uncovering some of the earliest fabric on the site in Casemate 11, including physical evidence that helped substantiate the legend of fabled Civil War prisoner William Henry Howe. In this regard, archaeological investigation has been a positive force at the site, helping both the academic understanding of the fort and enhancing its historical interpretation.

LIDAR laser data is a modern method of surveying that uses laser beam pulses that stike the surface of the earth. The resulting data can render an extremely accurate picture of the minute changes in the topographical profile of a site, even revealing forms that are hidden by dense vegetation. Though



Figure 5.1

Highlighted areas of interest on the LIDAR data gathered in 2015 and publicly available through the Philadelphia GIS Services Department.

According to historic maps, Area 1 is the location of the high battery, Area 2 is the location of a historic shot furnace, Area 3 is the location of a guard house, Area 4 is the location of two currently open but uninterpreted demilune casemates, and Area 5 may be the location of an officer's privy serving the Commandant's House. The three indicated areas between 2 and 3 are as of yet unknown features. Area 6 is not visible on either normal or infrared photography. In addition to the indicated sites, the historic remains of fencing, channels, pathways, and possible buildings outside the area of interest are clearly visible.

Fort Mifflin has never been the subject of a specific LIDAR scanning project, its site is included in at least two scans recently conducted by other organizations;¹ this data is open to the public. The scans reveal that the high battery is in a good state of preservation and could be a potentially interesting place to initiate excavation (Figure 5.1).

Lastly, volunteer and local engagement has the potential to be optimized through organizational changes and outreach. There are already several groups involved in volunteer projects for the fort, but these can be characterized as either infrequent or emergency response. The Boy Scouts particularly represent the former category; local Boy Scout troops in the region make contact with Beth Beatty to initiate projects or camps, but none do so regularly. There are also a few Eagle Scout projects that have taken place which consist of fabricating wood trash bins, bird boxes, and fixing stone facing by the flag pole. The second category consists of mostly aging citizens who are passionate about the site but limited in their capacity to help regularly or with physical tasks; when, in 2014, the Officer's Quarters caught fire, several individuals from this category of volunteers showed up to help but their ability to participate in an effective manner was limited. This array of groups demonstrates that they are already invested and interested in the site. Management might allocate a season (or hire an intern) to collect and organize projects into a compendium according to time investment, difficulty/ ability and need truly optimize this capital. Several of the maintenance projects, such as repointing historic structures or improving site drainage, could

be done with the help of Boy Scouts and provide the chance to educate them about preserving historic fabric while at the same time accomplishing maintenance needs. Older volunteers who are less ambulatory could be utilized in less physical activities to a useful extent: these individuals are passionate about the site and want to contribute, but perhaps not willing to commit to a regular schedule for volunteering. An active communications campaign to advertise interpretation opportunities to these individuals, particularly events, offer them an opportunity to remain involved at the site in a productive manner. Developing a relationship with these volunteers while allowing them to enjoy public engagement has the possibility to mature into a site docent program, or extra manpower to help run events.

Overall, Fort Mifflin already has several assets in its arsenal. These opportunities are offered to take pre-existing resources and develop them into tools with which the site management can expand the potential of Fort Mifflin.

THREATS

Threats to Fort Mifflin can broadly be classified into one of three categories—surrounding environment, organizational factors, and conservation issues. The surrounding environment is the most obvious threat to the site, but it is also the hardest to remedy since the fort cannot simply be plucked out of its context and moved somewhere else and the surrounding organizations who dwell on the land are not necessarily interested in or obviously impacted by issues facing Fort Mifflin. Organizational factors are perhaps the hardest to address

¹ The Delaware Valley Regional Planning Commission completed one survey in 2005, and the City of Philadelphia more recently.

as they are not necessarily objective threats but are the end result of a collective body of decisions, events, and attitudes chosen and inflicted over the lifetime of the site as a public monument. Conservation issues are easy to address theoretically in that they are largely scientific and objective in nature. In reality, the ability to address conservation problems is much more difficult as the factors that lead to their existence are highly reliant on both the surrounding environment and organizational limitations. Thus, threats at Fort Mifflin, though varied, are also intimately interconnected in a three-part axis constituting internal and external environment and the fabric of the site itself.

Approaching Fort Mifflin, the distance from the city and from neighboring residential areas is quite noticeable. Though Mud Island is no longer an isolated tidal island of the Delaware River surrounded by water and remote farmland, Fort Mifflin nevertheless remains a remote location. Seemingly separated from Eastwick by the busy I-95 expressway and a belt of oil refineries, Fort Mifflin at once seems both close to the busyness of Philadelphia and still yet far away from it. At the site itself, both the airport and the river dominate the sensory environment. These factors combine to form a set of daunting environmental threats to the site.

Philadelphia International Airport serves as the hub for over 431,000 planes a year; 121,000 of which fly directly over or past Fort Mifflin, translating to about one plane every 60 seconds all day, every day. Because of this, Fort Mifflin receives a constant auditory assault of 75dB of noise resulting in <u>damage to the si</u>te from vibrations.² Though the 2 United States, Federal Aviation Administration, Eastern Region Airports Division, and Lynn A. Keeley,"Sound Insulation of Eligible Areas of Fort Mifflin," (Camp Hill, PA: U.S. Department of TransFederal Aviation Administration (FAA) attempted to mitigate this threat from 2007-14 through a series of improvements meant to soundproof the site's educational and work spaces,³ areas not hardened against sound show signs of degradation which may be from the backdraft of plane engines or the constant vibration from soundwaves.

Additionally, the river that Fort Mifflin was once designed to protect now threatens the fort as well. The Intergovernmental Panel on Climate Change (IPCC) predicts a global sea level rise of as much as one and a half feet by 2060 and three feet by 2100.⁴ Lying on a historic tidal island, and with the surrounding marshes either gone or developed, the National Oceanic and Atmospheric Administration (NOAA) predicts Fort Mifflin will receive double the IPCC predicted numbers. NOAA classifies Fort Mifflin as a site of greatest threat and is highly confident in its prediction that unless mitigated, the site will be under three feet of water by 2060, and six feet of water by 2100.⁵

Organizational threats at Fort Mifflin are a bit harder to classify due to their subjective nature. According to site's Executive Director, the staff and volunteers of the site have been suffering from low morale after a 2014 fire damaged the historic Officer's Quarters and destroyed many records and <u>artifacts stored in the building. This low morale is</u> portation, 2015).

5 NOAA, "Sea Level Rise Viewer," Digital Coast, accessed September 27, 2017, https://coast.noaa.gov/digitalcoast/tools/slr.

³ PHL Fast Facts, Public Relations, Philadelphia International Airport (Philadelphia, PA: Philadelphia International Airport, 2017).

⁴ United Nations, World Meteorological Organization, Intergovernmental Panel on Climate Change, "Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007," Section 10.6, edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, and H. L. Miller (Cambridge: Cambridge University Press, 2007).

combined with a historic sense of Fort Mifflin as an "underdog" site. With a constantly stretched budget, the site often feels a necessary burden to allow whatever group can pay for the usage of the site to use it for their purposes. This has led the site to be host to a varied group of stakeholders including Boy Scouts, reenactors, paranormal investigators, parties, weddings, speakeasies, cinemas, and even a Renaissance Faire. While this certainly gives the fort a lot of positive opportunities and press, it has resulted in a lack of clear vision on what the fort stands for and how it should be interpreted through the groups that use it. While certainly a weakness, this has also become a threat in that the lack of vision and feeling of defeat have allowed controversial groups to use the fort. For example, in April 2017, The Philadelphia Inquirer ran a story guestioning a recent decision to allow a group of World War II reenactors to transform the site into a Polish prisoner of war camp. The controversy, which brought condemnation from groups like the American Gathering of Holocaust Survivors, almost resulted in the City of Philadelphia disallowing all re-enactments at the fort.⁶ Though the fort does maintain programming and guidelines for each category of visitors, they do not have a general day-to-day interpretation method beyond aging signs posted around the property, leaving visitors who are not part of organized groups to wander the site without much guidance, exposing the site to a host of potential problems including injuries, fabric damage, and unclear historical interpretation.

The final set of identified threats to the fort is a challenge faced by all historic sites seeking to

maintain their historic fabric-conservation issues. Despite its age, the fort is actually in remarkably good condition, even considering the multiple fires on the site over the past 50 years. However, there are a multitude of small issues affecting the site such as rising damp, goose infestation, failing surface coatings, failing masonry, and openings to the interior sections allowing animal intrusion. Most of these issues are easily remedied by simple fixes that may only cost a few hundred dollars. But, with a stretched budget and attention focused on other things, many of these issues are going unaddressed. Neglected masonry on the fort's northern sally port has resulted in a notable bulge in a retaining wall which will likely fail in the near future (Figure 3). The iron chicken wire once blocking chimney flumes and casement openings has corroded away, allowing birds, bats, and other animals to infest the lower levels of the chambers beneath the walls (Figure 4). Failing surface coatings on the dormers and walls of buildings will eventually allow moisture intrusion into the interior of historic buildings as the building envelopes become progressively compromised (Figure 5). Compared to the fires that have ravaged some of the buildings, these are small issues, but if they are not addressed in the near future, small threats will become large problems transforming relatively inexpensive fixes into costly restoration and preservation campaigns.

⁶ David Murrell, "What's with the Nazis at Fort Mifflin?" Philly. com, April 17, 2017, accessed September 27, 2017, http://www. philly.com/philly/news/Nazi-Reenactors-at-Fort-Mifflin.html.

06 Framework: Preservation Plan

The purpose of the preservation plan is to offer constructive critiques and thoughtful solutions to a diverse array of areas. Areas for improvement established through ongoing analysis from this study are arranged in three categories which together constitute components that are equally essential to ensure continuing integrity of the site: Organizational Sustainability, Physical Sustainability, and Diversity of Engagement (Figure 6.1).

ORGANIZATIONAL SUSTAINABILITY

Organizational Sustainability describes areas for potential strengthening in the existing organizational structure at Fort Mifflin (Figure 6.2). To achieve this, we have targeted fundamental relationships that need to be encouraged, including the Friends of Fort Mifflin Board, the City of Philadelphia Parks and Recreation Commission and other high level stakeholders. Fort Mifflin could stand to benefit from an engaged responsiveness to the needs of the site and better utilization of the resources of these respective groups.

A potential source of information to aid the executive director in bettering the present organization at Fort Mifflin is the surrounding network of historic and recreational sites in Philadelphia. The management structure at the fort—city owned, non-profit operated—is not the

DIVERSITY OF ENGAGEMENT PHYSICAL

Figure 6.1 The Preservation Plan Framework consits of Organizational Sustability, Physical Sustainability, and Diversity of Engagement.

ORGANIZATIONAL SUSTAINABILITY

SUSTAINABILITY

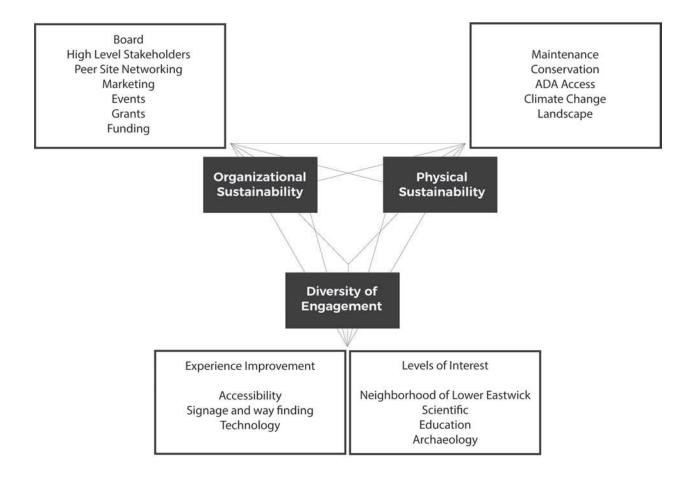


Figure 6.2 Areas of improvement or engagement are derived from the Preservation Plan Framework categories.

exception, but an overwhelming commonality for small historic sites. These similar operations in the city contend with the same matrix of assets and challenges, including surrounding urban/industrial development that detract from historical integrity, neglect from the Parks and Recreation Commission, and an engaged and passionate support network of stakeholders, and can be counted as examples from which the executive director and staff at Fort Mifflin could look to for guidance. The Peer Site Networking project contains institutional analyses that calls forth specific tools that these other sites have developed to improve visitor engagement, activate board members and volunteer groups, and effectively utilize medium operating budgets.

Each of these institutions has also developed unique interpretive programming that engages a wide-range of audiences, but these events are carefully curated to support the mission of the institution and promote the preservation of the site fabric. A review of current programming to evaluate according to the demands/potential damage to the site, keeping with the site mission and significance, and popularity through attendance and profit figures, etc., will result in list of prioritized events. Those events at the bottom of the list should be seriously scrutinized, and then either serious study should go into improving the event or others should be suggested in its place.

Funding is critical to all of these activities, and is present in all aspects of the triangle illustration, but control over funding is administered by the organization. The major sources of money for Fort Mifflin include event profits and funded grants and to a

lesser extent visitor revenue. This includes: outreach and visibility at other sites through brochures and advertisement, with the aim to target tourists and those who are interested in local history; through social media platforms like Facebook advertisements, to reach those who do not already know about the site; and Mail Chimp emailed newsletters, which are aimed to engage those who have already been to the site and wish to visit again. A revitalized marketing strategy that centers on actively using a broader range of social media platforms could improve visibility, and subsequently profits from both the visitor and event sector, for a low cost. The more valuable monetary source, and more sustainable option to some extent, is grant money. Grant money can be strategized and allocated to specific projects more reliably than utilizing visitor revenue, which can be affected by the whim of the weather, politics, and other extenuating circumstances. The current scope of grants to which the executive director applies include cultural and heritage-specific funds. Widening this view to include environment- and education-based could promote a sustainable monetary base and diversify the programing at the site, rather than detract from the primary site values. Grants for architectural conservation measures, climate change, landscape studies, and alternative interpretation are included in Volume II of this report, along with supplementary research to direct subsequent activities.

PHYSICAL SUSTAINABILITY

The quantity and variety of historic built fabric is one of the greatest resources at the Fort Mifflin site. Physical sustainability herein refers to proper maintenance and care for the existing fabric to ensure the continuing survival of the historic architecture and accessibility to all visitors (Figure 6.2). These include means that are meant to prioritize present resources, without significantly building upon them, to ensure that conservation occurs in a sustainable and minimal way following a typical preventive maintenance plan. Measures like an effective drainage system and landscaping help to both maintain the fabric of the site and ensure safe navigability of the site. Particularly as the walkways and entrances within the parade ground are not up to ADA accessibility measures, maintaining what pathways are in place means a greater experience for visitors to the site.

The architecture of Fort Mifflin is significant on its own, but the surrounding environment and landscape is almost its equal in terms of unique features and integrity. Fort Mifflin's connection to the Delaware River and its green boundaries which separate the industrial and urban exterior elements from the historic fortification walls constitute a character-defining aspect to the site. These spaces can be overlooked, as they are often ignored at historic sites in favor of old brick and stone, but safeguarding them for the sake of the holistic site integrity is critical. Particularly in the case of Fort Mifflin, green space elements form an enclosure around the site and block out urban auditory and visual noise. Maintaining these areas is essential to maintain the integrity and experience of the site.

The trend of climate change, however, poses a threat to the architectural and landscape elements at the site. The northeastern seaboard has seen an increased number of hurricanes and winter storms; for seaside and riparian areas, storm surge has become a prevalent concern. Finding ways to manage these deleterious effects of climate change through work with Federal Emergency Management Agency (FEMA) and National Oceanic and Atmospheric Administration (NOAA) could potentially yield chances for partnership, interpretation, and access to alternative funds through coastal resilience projects.

DIVERSITY OF ENGAGEMENT

Diversity of Engagement includes those measures and elements which apply directly to the visitors at Fort Mifflin; this has been further subdivided into areas which address methods of expanding the variety of individuals and groups that visit the site and measures to improve the current experience of the site (Figure 6.2).

Current site management philosophy focuses on cultivating appeal to a wider base of groups through a variety of programmatic and interpretive tools which are meant to attract diverse individuals while still operating within the appropriate uses for the site. Extra-programming through other educational or recreational means have been proven to successfully expand interest and engage stakeholders not originally attracted to the tenant themes of the site. Expanding interpretation and uses of the site to other uses can be done so with sensitivity to the primary values and original stakeholders of the site. Aims that are meant to include. members of Lower Eastwick and other local residential neighborhoods should be a priority, as their proximity to the site establishes them as a primary (although yet to be engaged) stakeholder. Their ownership of the site can bring significant benefits

to Fort Mifflin, including political power through their constituency in their district to a number of ends: they might lean on their city councilman to pressure the Parks and Recreation Commission, or perhaps to demand a bus stop in front of the fort.

Improvements to the site experience can also help to engage present visitors on several levels through improved accessibility, helpful signage and way finding elements, and technology. Directing maintenance to ensure that walkways remain clear of obstructions and dry can improve paths for those who are differently able without requiring the funds necessary to upgrade paths to ADA Accessibility codes. Signage around Fort Mifflin Incorporating technology to form a digital dimension on the site can creatively integrate these themes and improve accessibility for those who require universal access or increase visibility for those site elements which are inaccessible, such as the river beach, or the high battery.

PRIORITIZED ITEMS

From the three parts of the Preservation Plan Framework, we derive a series of tasks and goals which are prioritized according to what we have estimated to be absolutely crucial for Fort Mifflin's continuing success; these are categorized under the headings of Critical, Short Term, and Long Term according to realistic time requirements and urgency (Figure 6.3).

Critical: Critical measures are those items which are necessary to implement for the survival of the site, both in terms of organizational structures and financial sustainability. These are items that should be acted upon as soon as possible but, once enacted, also treated as ongoing projects for review and realignment when mission creep occurs or priorities shift.

	Critical	Short Term	Long Term
Organizational Sustainability	Business Plan Peer Site Networking Program Prioritization Low Cost Marketing Grant Diversification	Digital Marketing Volunteer Coordination	Fundraising Goal Operating Budget
Physical Sustainability	Emergency Stabilization	Preventative Maintenance Improved Accessibility and Wayfinding	Major Stabilization and Rehabilitation Projects
Diversity of Engagement	Neighborhood Outreach: Marketing, Promoting Green Space Use	Diversifying Event Themes, Types	Expanding Exhibit Mateirals, Themes

Figure 6.3 Prioritized Goals for the Executive Director.

An item that the site management organization should immediately consider to develop is a thorough business plan. The following section in this volume, entitled Business Plan, offers some prioritized measures for the executive director to implement.

The management organization should also look to develop peer relationships with other small historic in Philadelphia for strategies and tools to better their programs and management. These sites have largely similar management structures, and have in several instances demonstrated an ability to take advantage of their limited resources to build meaningful and popular programs in their neighborhoods while also promoting a stewardship or historic fabric. A review of the popular programs put on at the site to realign the types of events and programs with the educational objectives and thematic opportunities stated in the mission of the site. While historic events are relatively static, interpretive objectives and themes are at the whim of present social paradigms. The publicity issues incurred after the World War II Battle for Schmidt reenactment in 2016 indicate that this is one such event that should be thoughfully reconsidered and subjected to thorough theoretical analysis.

To sustain the current programing and to focus on developing the following areas, a firm funding base is essential. This money should largely come from a diverse base of foundational grants and non-profit assistance. While there are several cultural and historical grants available, these are highly competitive due to the number of other historic sites within the city. The executive director could consider applying to diversity of grant types that promote cultural learning, environmental or technology-based education, or funding relating to the armed forces and telling of American military history.

Emergency stabilization of historic architecture is critical to the integrity. As a stabilized site with proximity to a large body of water and a high water table, there are several elements within the site's environment that make it more prone to deterioration. A prioritized project that targets specific elements of the built landscape can help to safeguard the architecture for a comparatively minimal cost; if left untreated, some of these issues will escalate into catastrophic failures that can irreversibly damage the integrity of the site and cost the management several times the budget for emergency stabilization. See the Conservation Plan in Part II.

Short-Term: The areas of improvement accorded to the Short Term category are crucial but also require funding and some planning or proposals before action is taken. Site-wide improvements include measures for visitors and built fabric alike. Signage and way finding for visitors touring the site at the present is minimally intrusive but confusing; the executive director has pointed out that visitors often are not sure where to go upon first arriving at the site. Design proposals for these elements should still be minimally intrusive on the landscape without sacrificing instruction and clarity.

For the historic fabric, a preventive conservation schedule with concrete plans for cyclical tasks and to allocate funds for reinvestment is critical for sustainably managing these the historic structures. These plans, which highlight the importance of cyclical maintenance and annual projects, have been proven to effectively safeguard historic fabric through measures that are relatively low cost and effort while avoiding expensive emergency interventions. To ensure the continuing preservation of physical fabric at the site, the executive director should consider hiring a consultant to develop a preventive maintenance plan

Marketing and outreach is relatively low cost and effort at the present; social media and digital marketing have dramatically reduced the costs and limitations in traditional forms of marketing. Research into improving the scope of marketing platforms and engagement with the surrounding residential neighborhoods to expand visitor-ship and increase renown. Developing and printing brochures to be placed at other historic sites of similar size and subject matter in the region will increase public knowledge of the site amongst touring groups. Outreach to the local community could be done in a similar manner, but would also require research into extra programming and interpretive themes that better engage with the socioeconomics of this area. The Lower Eastwick neighborhood, and much of Philadelphia, is largely African American; this demographic is often poorly represented or overlooked in colonial or Revolutionary War heritage. The tide of interpretation at other sites is slowly shifting to focus on these narratives, and Fort Mifflin would be wise to consider similar programming. Efforts to highlight this history, or developing extra-programming to better engage the local community is encouraged, as popular theory links these local relationships to resiliency of a site.

Long-Term: In the Long-Term category are projects can take up to multiple years to accomplish or plan

and require more substantial funds. These include massive conservation plans to rehabilitate structures that are structurally unfit for exhibition and use, such as the Commandant's House, or storage, as in the case of the Officer's Quarters. Such a project will require more funding from fundraising and grant writing, which are better outlined in the proposed business model. The model will also discuss an operating budget through which the site can support its preservation goals and events sustainably.

Success Matrix

Much like the tripartite preservation plan framework, the success of Fort Mifflin cannot rely on any one asset or figure to ensure both its popularity and ongoing success in the future. The number of visitors to a site is not the only metric of success and, if unchecked, can cause serious degradation to the physical fabric and as a result to the experience to a historic site. Prioritizing the physical fabric, to the opposite extreme, means that the historic architecture is in mint condition over the opportunity for money to be devoted to improving interpretive experiences (Figure 6.4). The success of a Fort Mifflin depends on a careful balance measures to improve A) funding, B) number of visitors, and C) stability of the physical fabric (Figure 6.5). Underlying all of these items presumes an effective site management, support and engagement from the board, and a well directed facilities and maintenance program. A robust and well-rounded effort to target the measures addressed in our critical and short term categories can in the immediate future promote success in these three metrics.

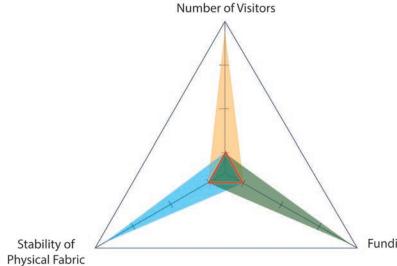
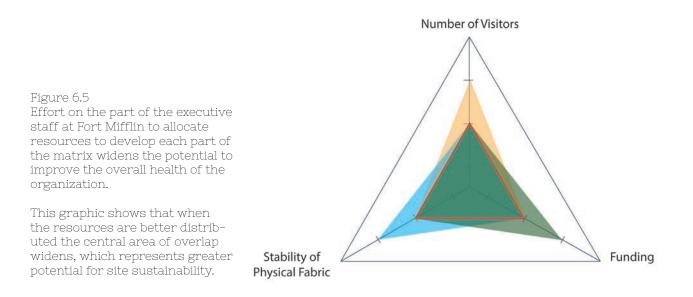


Figure 6.4

Selective allocation of attention and resources to any single part of the Success Matrix triangle leads to a diminished area of overlap in the center, which is highlighted in red: this area represents the potential for the site to be sustainable and well-maintained.

Funding



07 Business plan

EXECUTIVE SUMMARY

Fort Mifflin as National Historic Landmark situated in southwest Philadelphia on the border of Philadelphia and Delaware Counties. Owned by the City of Philadelphia, Fort Mifflin does not receive financial support from the city and is operated and managed by the nonprofit organization Fort Mifflin on the Delaware (FMOD).¹ The site faces funding issues, a complete lack of financial support from the City, and environmental threats; these challenges are met by a small, yet dedicated full-time staff and passionate board members and volunteers. This Business Plan, developed as a result of the studio team's engagement Fort Mifflin between August and December 2017, is designed to support and reinforce the three categories that serve as the basis for the Fort Mifflin Preservation Plan: Organizational Sustainability, Physical Sustainability, and Diversity of Engagement. Internally, FMOD has worked to create long-range plans for organizational sustainability. In 2013, FMOD's Executive Director and Board of Directors developed the "Fort Mifflin on the Delaware Strategic Plan 2014-18" with a consultant from LaSalle University's Nonprofit Center.² However, the organization has faced challenges in following-through with the goals developed in the Strategic Plan. This Business Plan was not only developed to reinforce the Fort Mifflin Preservation Plan, but it is intended to serve as a stepping stone or implementation plan to aid FMOD in carryout the goals the organization set for itself:

- 1. Achieve Financial stability through growth of earned income and improved diversity of funding sources.
- 2. Enhance mission-driven programs to maximize both revenue and reach.
- 3. Create a marketing program that will raise the profile of the site and drive attendance at both public and reserved programs.
- 4. Strengthened leadership and infrastructure in order to establish a solid foundation on which to build sustainable future growth.³

^{1 &}quot;Interview with Executive Director Elizabeth Beatty,"; Interview by Anthony R.C. Hita, Kelsey A. Britt, and John G. Giganti, October 5, 2017.; The City Of Philadelphia's Department of Parks and Recreation was contacted for an interview, but no response was received.

² Fort Mifflin on the Delaware, The Nonprofit Center at La Salle University, C. Terrill Thompson, "Fort Mifflin on the Delaware Strategic Plan 2014-18," (Philadelphia: Fort Mifflin on the Delaware, 2013), 3.

³ Ibid.

Fact Sheet: Fort Mifflin

Site Name	Fort Mifflin
Address	6400 Hog Island Road (Fort Mifflin and Hog Island Roads)
Owner	City of Philadelphia; Army Corps of Engineers
Manager/Operator	Fort Mifflin on the Delaware (FMOD)
Executive Director	Elizabeth Beatty
Site Size	40.8 acres (City of Philadelphia) 1.38 acres (Army Corps of Engineers) Total: 42.18 acres
Number of Visitors	5,000 to 7,000
Primary Service Market	Tri-State Area: Pennsylvania, Delaware, New Jersey
Total Operating Budget	\$204, 565 (FY 2014)
Total Earned Revenues	\$177, 488 (FY 2014)
Total Full-Time Employees	3
Total Part-Time Employees	8
Motto	History Lives at Fort Mifflin/The Fort that Saved America

Furthermore, this plan is designed to provide FMOD with meaningful, useful information and tangible steps for moving forward to achieve Organizational Sustainability and as a reference when implementing the Immediate, Short-Term, and Long-Term initiatives proposed in the Preservation Plan. To aid in the process, the framework for several projects has been developed by members of the studio team. The Business Plan consists of two parts. Part I provides a concise summary and assessment of Fort Mifflin and FMOD currently, while Part II, provides recommendations.

PART I: ORGANIZATIONAL AND FINANCIAL CAP-TURE

The organizational and financial capture is a compilation of information pertaining to Fort Mifflin on the Delaware's (FMOD) staff and Board of Directors, finances, and revenue sources.

1. Fort Mifflin on the Delaware Staff and Board of Directors

Currently, Fort Mifflin on the Delaware's (FMOD) staff is comprised of three full-time and eight part-time employees. The three full-time positions are filled by the Executive Director, Site & Program Manager, and Maintenance Coordinator, while all eight part-time positions are filled by Interpretive Staff who serve as guides and period interpreters for visitors.⁴

FMOD BOARD OF DIRECTORS: FMOD currently has a nineteen-person Board of Directors, which has

grown significantly over the last several years, and a five-person Advisory Board. An Executive Committee, comprised of a Chair, Vice Chair, Treasurer, and Secretary and filled by members of the nineteen-person Board, governs the Board of Directors.⁵ Standing Committees and Ad Hoc Committees, developed as needed, support the Board's Executive Committee, which itself is a Standing Committee within the Board's organizational framework. Per Board bylaws, the Executive Committee has the ability to act on behalf of the entire Board of Directors in-between regular meetings; the Board Chair, in turn, also has the responsibility of establishing Ad Hoc Committees as necessary and to appoint chairs to individual committees. ⁶

STANDING COMMITTEES (2017):

- Executive Committee
- Nominating Committee
- Planning Committee
- Buildings & Grounds Committee

AD HOC COMMITTEES (2017):

- Audit Committee
- Finance Committee
- Fundraiser Event Committees
- Investment Committee⁷

The Board elects its own members; the Nominating Committee is tasked with seeking out and vetting new members. Due to Board bylaws, the Executive Director has a voice during meetings, but it's not able to vote on decisions made by the Board and does have the power to elect new members to the Board. Currently, Board members bring profession-

⁴ Fort Mifflin on the Delaware, "Meet the Staff of Fort Mifflin," 2017, accessed November 10, 2017, http://www.fortmifflin.us/ about/meet-the-staff.; Fort Mifflin on the Delaware, "Fort Mifflin: Fort Leadership and Staff as of January 1, 2017," (2017), 1.

⁵ Beth Beatty, "Excerpts from Philadelphia Cultural Fund 2017 Application," (2017), 7. 6 Ibid., 8.

⁷ Ibid.

al knowledge from the fields of accounting, financial planning, banking and investments, contracting, education, and law, amongst others. While a number of Board members are incredibly engaged, and many donate their time and professional services and expertise to assist with Fort Mifflin's operations and management, maintaining Board engagement to follow through with strategic planning goals is currently a challenge for the Executive Director. The Board also lacks diversity; members are overwhelmingly white and male.

FMOD BOARD OF DIRECTORS COMMITMENTS AND LIMITATIONS:

- Agree to Performance Expectations (Financial/ Personal)
- Membership Fee: \$500
- Required Board Meetings (at minimum): 6 per year, including one retreat
- Serve on One Committee pertaining to professional/personal strengths and interests
- Board of Directors Term Limits: none
- Officer Term Limits: three consecutive 1-year terms⁸

2. REVENUE AND PROGRAMMING

Primarily, revenue at the Fort Mifflin is earned through programming offered at the site, which includes funds earned through visits from the general public, special events, educational offerings, paranormal programming, and site rentals. Programming at Fort Mifflin interprets multiple periods from the fort's long-spanning history, reaching far beyond the Revolutionary War period, and is designed to reinforce FMOD's mission:

"The mission of Fort Mifflin on the Delaware is to <u>develop, preserv</u>e and interpret Fort Mifflin as a ^{8 Ibid.}

National Historic Landmark whose unique history, original fabric and surrounding environment will be protected and used to educate and enrich students and families and serve as a significant regional tourist resource.

Physical and architectural preservation will reflect the period 1777 – 1875. Historical interpretation will be inclusive of the Fort's service during each of America's major wars: Revolutionary War, War of 1812, Civil War, World War I, and World War II. Environmental interpretation will be inclusive of the Fort's river setting, wetland habitat and wooded areas." ⁹

Through the efforts of the current Executive Director, FMOD has made a concerted effort to expand programming to increase the Fort's annual revenue and its reach and notoriety with the public. This sixyear-long effort is captured in the list of Programming Initiatives, located below:

- Large-scale public programming expanded from 7 to minimum 10 (annually)
- Paranormal programming focused on documented history
- All October programming rebranded as "Mud Island Halloween"
- Educational offerings for Boy Scouts
- Updated ad expanded school tours and education programs

Currently, programming at Fort Mifflin falls in six categories:

- 1. General Public Visitation/Public Events
- 2. Public Living History Events
- 3. Reserved School and Group Tours & Education Programs

⁹ Fort Mifflin on the Delaware, "Fort Mifflin on the Delaware Strategic Plan 2014-18," 5.

- 4. Paranormal Programs/Candlelight Ghost Tours/Night-time Events
- 5. Scout Camping and Day Trips
- 6. Site Rentals

Admission fees associated with the programming in categories (1) and (2) typically fall under General Admission Fees (Type 1) and Special Event Admission – Living History Events (Type 2), while the fees for programming associated with categories (3) through (6) varies. As a Blue Star Museum, Fort Mifflin offers free admission to Active Duty Military (and Active Duty Families). Fort Mifflin is open to the general public March 1st through December 15th, while visitors must schedule their visits December 15th through March 1st. Tours are available seven days per week with advanced registration.

VISITORS AND PROGRAMMING SUCCESSES

When presenting Fort Mifflin's various programming offerings, it is also important to discuss the typical visitors attracted to the site and its programming offerings and recent successes in regards to programming. FMOD's Executive Director has identified several categories of typical visitors to Fort Mifflin, including those visiting outside of the summer months; during the summer; weekend visitors; year-round day-time visitors; and visitors attracted paranormal programming in the evenings. While the typical visitor outside of the summer months is from the tri-state area (Pennsylvania, New Jersey, and Delaware), during the summer months, the fort sees an increase in visitors from a broader geographical area who are tourists and/or vacationers. Year-round, day-time visitors are most often families with school-age children,

veterans with an interest in military history, and "active adults." $^{\!\!^{10}}$

In recent years, the Executive Director witness the success of social media platforms, specifically Facebook, as a tool for attracting first-time visitors to Fort Mifflin. In addition to Facebook, FMOD maintains accounts on the following social media platforms: Instagram, Twitter, and Spotify. The "Events" feature on Facebook serves as low-cost means for drawing attention to the site's programming and also links to TicketLeap, the online platform utilized by FMOD to sell tickets.

General Admission Fees (Type 1)

Adults	\$8
Seniors	\$6
Children (6 to 12) and Veterans	\$4
Children 5 years and younger	Free

Living History Events (Type 2)

Adults	\$10
Seniors	\$8
Children (6 to 12) and Veterans	\$6
Children 5 years and younger	Free

Programming Category	Title of Program/Event/Rental	Admission/Fees
(1)	Open to the General Public	Туре 1
(1)	Bombardment Run	\$25
(1)	Airplane Day	Туре 2
(1)	Philadelphia Renaissance Faire	Varies
(2)	The Great War Remembered	Туре 2
(2)	The Great Escape	Туре 2
(2)	Kingdom of Lucerne's School of the Musketeer	Туре 2
(2)	Freedom Blast	Туре 2
(2)	Civil War Saturday	Туре 2
(2)	WWII: Explore the Eastern Front	Туре 2
(2)	Seafaring Saturday	Туре 2
(2)	WWII: The Battle for Schmidt	Туре 2
(2)	Siege Weekend	Туре 2

FORT MIFFLIN: PROGRAMMING OFFERINGS AND ASSOCIATED FEES

Programming Category	Title of Program/Event/Rental	Admission/Fees
(2)	Black Powder Friday	Type 2
(2)	WWII: Western Front	Type 2
(3)	Group Tour	\$6/person
(3)	 Group Tour and Education Program Includes: selection of one of the following educational themes: Revolutionary War, Civil War, or Paranormal. A Soldier's Story: Revolutionary War Soldier Life A Soldier's Story: Civil War Soldier Life Blood, Sweat & Tears: Civil War Medicine Spirit of History School Program 	\$8/person
(4)	Open Investigation Evening (Mud Island Halloween)	\$45
(4)	Candlelight Tours (Mud Island Halloween)	\$15-20

FORT MIFFLIN: PROGRAMMING OFFERINGS AND ASSOCIATED FEES

Revenue (FY 2014)

Contributions and Grants	\$31,877
Program Service Revenue	\$124, 405
Investment Income	\$1.623
Other Revenue	\$19,583
Total Revenue	\$177,488

Assets (FY 2014)

Beginning of the Year	\$203,781
End of the Year	\$193,064

Expenses (FY 2014)

Salaries/Employee Benefits	\$144,415
Other Expenses	\$60,150
Total Revenue	\$204,565

Endowment (FY 2014)

Beginning of the Year	\$130,206
End of the Year	\$30,372

Out of the events offered at Fort Mifflin, Siege Weekend continues to be the most profitable and well-attended. During the 2016 event, over 600 visitors and 150-175 reenactors visited Fort Mifflin over the weekend-long event.¹¹ During the 2016 fiscal year, FMOD also witness a 40% increase in school groups visitation, believed to be a result of the site's size, which allows a high volume of visitors at once.¹²

3. FINANCES

The financial information presented in this section combines information obtained online from the most recent, publicly accessible tax returns (filed in 2015 for fiscal year 2014) and information obtained during interviews with FMOD's Executive Director.¹³ Though Fort Mifflin is owned by the City of Philadelphia, the site does not receive any funding from the City. Therefore, FMOD is entirely dependent on revenue from programming, grants, and donations.

During the 2017 fiscal year, FMOD's Executive Director applied for grant funding through the Philadelphia Cultural Fund (PCF), Wayside Improvement Grant, the Pennsylvania Society of Sons of the Revolution, and the Connelly Foundation's Connelly Access Program (CAP), the last of which has been awarded to FMOD.¹⁴ FMOD has received funding from the PCF and the Pennsylvania Society of Sons of the Revolution in recent years. The process of applying for funding through the PCF takes places every three years and involves being reviewed by peer panel comprised of nonprofit organizations with similar budgets. Recently, in August 2017, FMOD entered into a partnership with the National Park Service as part of the "Washington-Rochambeau National Historical Trail" and this interpretative partnership is expected to provide \$30,000 in funding in 2018.¹⁵

PART II: RECOMMENDATIONS

Based on the evaluation of the Fort Mifflin's current operations, this section of the Business Plan outlines recommendations designed to reinforce the goals proposed in the Preservation Plan: increasing Organizational Sustainability, Physical Sustainability, and Diversity of Engagement. The proposed recommendations are intended to reinforce the Preservation Plan's three goals by providing FMOD with avenues for increasing traffic to the site and earned revenues. Recommendations include:

- (III) Assessment of Current Programming
- (IV) Identification of New Funding Sources
- (V) Developing Partnerships and Egaging Corpo-
- rate Sponsors
- (VI) Resources for Nonprofits
- (VII) Board Recommendations
- (VIII) Staffing Plan

(I) NEW VISION

First, the studio team recommends expanding upon Fort Mifflin on the Delaware's (FMOD) current mission and building upon the slogan, "History Lives at Fort Mifflin," by incorporating the narratives of African American soldiers into the site's 15 Ibid.

^{11 &}quot;Interview with Executive Director Elizabeth Beatty,"; Interview by Anne K. Albert and Anthony R.C. Hita, November 12, 2017.

¹² Beatty, 4.

^{13 &}quot;Fort Mifflin on the Delaware," Internal Revenue Service, Form 990 (2014).

^{14 &}quot;Interview with Executive Director Elizabeth Beatty,"; Interview by Anne K. Albert and Anthony R.C. Hita, November 12, 2017.

⁽I) New Vision

⁽II) A Tool for Management: Values-Based Site Management

programming and interpretation. Research compiled as part of this studio project illuminated the contributions of African American soldiers to Fort Mifflin and the US Military and is compiled in Vol. II. This documentation reveals the role of African American soldiers at the site at multiple periods on the fort's lengthy history, most notably during the 1777 bombardment and siege. Incorporating this history into the fort's history provides FMOD the opportunity to present an overlooked narrative and important aspect Fort Mifflin's history. Presenting this history also creates the opportunity for FMOD to connect with new visitors, nearby communities, such as Eastwick in southwest Philadelphia, the greater Philadelphia and tri-state region, and visitors to the fort from throughout the United States. In addition to interpreting the fort's connection to African American soldiers, the studio team recommends moving forward with two categories of programming:

- Programming that pertains directly to Fort Mifflin's history, which includes the majority of FMOD's current programming, and
- Programming that does not connect to Fort Mifflin's history, but takes advantage of the site's potential as an insulated greenspace with a collection of buildings, both of which are flexible to new short-term and temporary uses. This new proposed category of programming also ties directly to contemporary Values developed for Fort Mifflin by the studio team, which are defined in the following section.

(II) VALUES-BASED SITE MANAGEMENT

After identifying and mapping stakeholders (see

Stakeholders section of this document), the studio team identified values associated with Fort Mifflin using the Getty Conservation Institute's (GCI) framework for values-based site management. The GCI defines values-based site management as "the coordinated and structured operation of a heritage site with the primary purpose of protecting the significance of the place as defined by designation criteria, government authorities or other owners, experts of various stripes, and other citizens with legitimate interests in the place."¹⁶ When identifying values, it is crucial to differentiate between values and significance, as values are defined as the "characteristics attributed to heritage objects and places by legislation, governing authorities, and/or other stakeholders."

Within this management framework, articulating values is crucial in order for management to coordinate and structure their operations in a way that continues to protect the significance attributed to the site by its historic designation(s). While a historical site's conservation and accessibility to the public are typically the primary goals of a site manager, the values-based framework also acknowledges that site managers may be challenged with prioritizing multiple objectives, as there may be conflict between the benefits that different stakeholders. expect to receive from a site. If Fort Mifflin were to adopt this proposed model of site management, Fort Mifflin's staff and Board of Directors would be tasked with considering all stakeholders who have an interest in or benefit from the site during their decision-making processes.

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¹⁶ Randall Mason and Margaret G. H. MacLean, "A Case Study: Hadrian's Wall World Heritage Site," Prepared for English Heritage, Los Angeles: The Getty Conservation Institute, 2003, 1.

Historical Value. First, Fort Mifflin has a direction connection to Revolutionary War era in American History. The British military's bombardment and siege of Fort Mifflin was one among a series of events that played a direct role in changing the course of the American Revolution. Furthermore, significant events and developments that took place during the fort's 176-year-long continued use and service, following the American reoccupation in 1778, typically coincided with advances in military fortifications and weaponry and major events in United States' history.

Aesthetic Value. Though no longer located on an island due to land changes over time, Fort Mifflin is situated on the west bank of the Delaware River and the site retains a direct connection to the waterfront and the fort retains its moat. Additionally, Fort Mifflin retains an intact picturesque landscape; the relationship between buildings and structures within the fort is discernable and the landscape reflects its historic uses. Though Fort Mifflin remained in active use until the mid-twentieth century, the fort retains a collection of Federal-era buildings, while utilitarian buildings and features, -such as the defensive walls, casemates, magazines, and an artillery shed, directly convey their historic use.

Scientific Value. Fort Mifflin presents tremendous archaeological potential and value. Unlike other Revolutionary War-era sites in Philadelphia, such as Independence National Historical Park in, Fort Mifflin has remained relatively undisturbed. Fort Mifflin's stock of buildings and defensive structures also has the potential to yield information regarding eighteenth and nineteenth-century construction and engineering techniques and defensive architecture. Lastly, climate change and rising river levels are currently threatening Fort Mifflin and will continue to intensify without intervention; the site can serve as a microcosm for studying the impacts of climate change on a historic resource.

Educational Value (Contemporary). Fort Mifflin's historical narrative, which parallels major events in our nation's history beginning with its founding, is communicated by the site's intact historic fabric, which imparts educational and cultural benefits on visitors, ranging from school children to military veterans. Due to Fort Mifflin's high degree of integrity, the site poses both hands-on and immersive learning possibilities, focused on the both the lives of soldiers, and later, the lives of prisoners during the Civil War. The fort's story of perseverance provides a theme that a multitude of visitors can connect to.

Economic Value (Contemporary). Maintaining, or even increasing the economic benefits reaped from visitors to Fort Mifflin is crucial to ensuring the site's preservation and its accessibility to the public, in turn, increasing Fort Mifflin's long-term sustainability.

Social/Recreational Value (Contemporary). Currently, many groups interact with and utilize Fort Mifflin's facilities on a frequent basis, including historic reenactors, the Boy Scouts of America, and paranormal investigators. The goal to attract diverse groups and users to Fort Mifflin, who will form their own connection to the site, is reflected in current programming and events offered by management. Fort Mifflin also remains an intact greenspace within an industrial context and has the potential to serve as an accessible greenspace for nearby communities, such as Eastwick, and for other Philadelphia residents.

(III) ASSESSMENT OF CURRENT PROGRAMMING

To move forward with the recommended new vision and incorporate the identified values in FMOD's decision-making processes, the studio team recommends that FMOD assess all current programming perform a cost benefit analysis of all current programming to determine the financial benefit of each event and form of programming.

A cost benefit analysis will assist FMOD with redefining sustainability at Fort Mifflin and ideally, free funding for FMOD to launch new programming that responds to expanding upon Fort Mifflin's African American narrative and to part (2) of the new mission.

(IV) IDENTIFICATION OF NEW FUNDING SOURCES

To aid FMOD staff in finding additional funding sources, this section contains a table of grants. Additionally, the studio team recommends that FMOD purchase a membership with a grant database or utilize no-cost resources, such as:

- GrantWatch: Grants for Nonprofits ¹⁷
- Foundation Center ¹⁸
- GuideStar 19
- Foundation Search ²⁰

Grants.gov ²¹

Applying for grants is often a tedious and time-consuming process. The studio team recommends that FMOD take advantage of a "Common Grant Application," which will allow an organization to standardized necessary and required information to ease the application process. ²²

The following grants were identified to aid FMOD in expanding Fort Mifflin's African American narrative. This list is by no means exhaustive, but is meant to act as a sampling of potential grant sources so that, if interested, other opportunities might be explored in addition to those presented here.

Museum Grant for African American History and Culture, Institute of Museum and Library Services: This grant is specifically designed to help promote and support projects that improve the operation, care of collections, and management at sites significant to African American history. The grant is broad, with the only stipulations being that it must be used to address some aspect of African American history or the care of a site important to African American history.²³

African American Civil Rights Grants, National Park Service: Because Fort Mifflin intersects the line between military history and racial history in the United States, the site should consider civil rights grants as potential avenues of funding to develop a more robust African American program. Especially considering the challenges of groups like the

¹⁷ GrantWatch. "GrantWatch: Time to Apply," accessed December 1, 2017, https://www.grantwatch.com.

¹⁸ Foundation Center, "Foundation Center: Knowledge to Build On," accessed December 1, 2017, http://foundationcenter.org. 19 GuideStar, "GuideStar," accessed December 1, 2017, http:// www.guidestar.org/Home.asp

²⁰ Foundation Search, "Foundation Search," accessed December 1, 2017, http://www.foundationsearch.com.

²¹ Grants.gov, "Grants.gov," accessed December 1, 2017, https://www.grants.gov.

²² Philanthropy Network. "Resources for Nonprofits," accessed December 1, 2017, https://philanthropynetwork.org/resourc-es-nonprofits.

²³ https://www.imls.gov/grants/available/museum-grants-African American-history-and-culture

Potential Grants for Fort Mifflin to Consider:

- American Battlefield Protection Program
- American Express® Partners in Preservation grant program
- America's Historical and Cultural Organizations: Planning Grants and Implementation Grants
- Cynthia Woods Mitchell Fund for Historic Interiors
- Delta Community Supports
- Institute of Museum and Library Services
- Johanna Favrot Fund for Historic Preservation
- The Kinsman Foundation
- Knight Cities Challenge
- The Knight Foundation
- National Center for Preservation Technology and Training
- National Endowment for the Humanities:

76th Coast Artillery in World War 2, the site has the opportunity to speak to broader issues of racial relations as they relate to military history. This grant in particular is meant to fund a broad range of planning, development, and research programs, including but not limited to developing interpretative and educative programs, or repairing architectural features.²⁴

Common Heritage Grant, Division of Preservation and Access, National Endowment for the Humanities: The Common Heritage program of the NEH seeks to help public institutions to better engage the public in the exploration of common heritage. The grant must be used on a project that would engage the public via a public heritage event, which could include lectures, tours, presentations by experts, workshops, or living history, among other Exhibitions

- National Endowment for the Arts: Grants for Arts Projects: Design
- National Endowment for the Humanities: Historic Places
- National Trust Preservation Funds
- PA Cultural and Historical Support Grant
 Program
- Partnership-in-Scholarship Grants
- Peter H. Brink Leadership Fund
- The Pew Center for Arts & Heritage
- PHMC Keystone Grant
- Save America's Treasures
- Save Our History Grant Program
- We the People: Interpreting America's Historic Places Grants
- William Penn Foundation

things. Because Fort Mifflin is well-equipped to provide the types of activities the grant is meant to fund, this grant would provide a great opportunity to experiment with African American history without necessarily committing site resources needed elsewhere.²⁵

Dialogues on the Experience of War, Division of Education Programs, National Endowment for the Humanities: Unlike the Common Heritage grant, the Dialogues on the Experience of War grant is specifically designed for sites whose goal is to reach out to veterans and the public on topics relating to the experience of war. The programs desired by the grant are those that explore topics like military service, patriotism, civic duties, and military history of soldiers and sailors. A grant of this nature might be best applied to developing the more modern military history of the site, surrounding groups like 25 https://www.neh.gov/grants/preservation/common-heritage

 $^{24\} https://www.nps.gov/preservation-grants/civil-rights/index.\ html$

the 76th Coast Artillery. But, it could conceivably also be used to facilitate programs that explore living history so long as that living history is aimed to speaking relevance to modern social experiences surrounding war.²⁶

Preservation Assistance Grants for Smaller Institutions, Division of Preservation and Access, National Endowment for the Humanities: A general grant meant for small to mid-sized institutions, this grant is not specifically focused on African American history projects, but is instead designed to encourage institutions to draw on the knowledge of preservation professionals to help design programs or care for their sites. Fort Mifflin is ideal for this grant because the grant requires the applicant site to first speak to consulting professionals about the development of programs or care of the site, which Fort Mifflin is doing currently by commissioning this report.²⁷

(V) ENGAGING CORPORATE SPONSOR/PARTNER

The studio team recommends that FMOD reach out to corporations for sponsorship and/or partnership opportunities as a channel for raising additional funding and potentially, building new relationships with a group or organization of people who may even volunteer their time to Fort Mifflin.

Selecting a Corporate Sponsor/Partner:²⁸ FMOD will need to research candidates to target. Criteria can geographical proximity, the corporation's 26 https://www.neh.gov/grants/education/dialogues-the-experience-war 27 https://www.neh.gov/grants/preservation/preservation-asmission statement, comparable organizations that they currently collaborate with or support, and even the CEO/leader's personal interests. This research, followed by additional conversations if contact is made with a corporation, are imperative. FMOD will want to know that their organizational values align with the corporate sponsor/partner. Selecting corporations whose customer base is similar to Fort Mifflin's current supporters or new demographics the site would like to engage is also something for FMOD to consider.

Funding and Donations: If a corporation agrees to sponsor some aspect of FMODs operations and/ or a specific event, or if they simply want to give a donation, FMOD can provide advertising on the Fort Mifflin website and on-site, thanking said corporation for their generosity. FMOD can also build a relationship with said sponsor/donor by offering corporate volunteer opportunities at Fort Mifflin or engage the corporation by providing a free tour to employees. Additionally, FMOD can work with a corporation to see if they are willing to match employee donations.

(VI) RESOURCES FOR NONPROFITS

The studio team recommends that FMOD take advantage of resources for nonprofit organizations. Ideally, joining (if applicable) or connecting with these organizations will provide FMOD with networking opportunities, connecting FMOD to other nonprofits and to funders and will expose FMOD to training opportunities and conferences.

sistance-grants-smaller-institutions

²⁸ Donor Drive, "DonorDrive: Peer-to-Peer Fundraising," accessed December 1, 2017, https://www.donordrive.com/ blog/beyond-sponsorship-a-better-approach-to-corporate-funding-for-nonprofits.

Resources in Greater Philadelphia Area and Beyond:

- Philadelphia Network: Greater Philadelphia²⁹
- The Regional Foundation Center (RFC)³⁰
- The Nonprofit Center at La Salle University ³¹
- Margaret R. Grundy Memorial Library Nonprofit Resource Center (NRC) ³²
- Association of Fundraising Professionals-Greater Philadelphia Chapter³³
- Pennsylvania Association of Nonprofit Organizations (PANO)³⁴
- The Nonprofit Finance Fund (NFF)³⁵

(VII) BOARD RECOMMENDATIONS

Though members of FMOD's Board of Directors dedicate their personal time and professional services to Fort Mifflin, the Executive Director has expressed issues with meeting attendance and members following through with long-term tasks and projects, often designed to be implemented and carried out via the two forms of subcommittees (Standing and Ad Hoc) to assist FMOD' small staff. Currently, the Board also lacks a diverse membership. Understandably, the Board of Directors have personal and professional commitments outside of Fort Mifflin, but the following suggestions are designed to engage Board and activate less involved

35 Nonprofit Finance Fund, "What We Do," accessed December 1, 2017, http://www.nonprofitfinancefund.org.

members. Due to Board bylaws, FMOD's Executive Director is limited in their ability to oversee the Board. Therefore, the following recommendations are for the Board of Directors.

Board Recommendation 1: Set Goals for Targeting New Members

Task: Target highly-motivated members with specific skillsets and professional experience, such as such as Fundraising, Marketing, Architectural Conservation, Architectural History, and/or Historic Preservation, that the Board currently lacks or requires additional support. Set a measurable goal, including the number of new members the Board would like to attract over a certain period of time and steps for implementation.

Benefits:

- Introduces 'new blood,' energy, and ideas to the organization
- Brings necessary skills and experience to Fort Mifflin
- Increasing number of board members allows for greater distribution of work
- Possible racial and socioeconomic diversification of the board
- May motivate current memers who are less active

Board Recommendation 2: Board of Directors who Recognize Current Issues Should Work to Change Board Culture

Task: Board members who recognize challenges facing the Executive Director can work to create an organizational culture where missing meetings and not following through with tasks is not accepted,

²⁹ Philanthropy Network, Greater Philadelphia, "Philanthropy Network: Greater Philadelphia," accessed December 1, 2017, https://philanthropynetwork.org/resources-nonprofits. 30 Free Library of Philadelphia, "Business Resource and Innovation Center," accessed December 1, 2017, https://libwww. freelibrary.org/programs/bric/nonprofit.

³¹ La Salle Nonprofit Center. "The Nonprofit Center at La Salle University's School of Business," accessed December 1, 2017, https://www.lasallenonprofitcenter.org.

³² Grundy Library. "Nonprofit Resource Center," accessed December 1, 2017, http://www.grundylibrary.org/content/non-profit-resource-center.

³³ AFP, "AFP: Greater Philadelphia Chapter," accessed December 1, 2017, http://www.afpgpc.org.

³⁴ PANO. "Pennsylvania Association of Nonprofit Organizations," accessed December 1, 2017, http://www.pano.org.

brushed off, or made to seem typical. Bylaws could also be altered, creating repercussions for absences and lack of engagement.

Benefits:

- Increase involvement and engagement
- Deter members who do not pull their weight from remaining on the board

Board Recommendation 3: Board of Directors Should Reach out to Eastwick's Community Organizations to Engage a Resident(s) to Join the Board.

Task: With the current disconnect between Fort Mifflin and its closest residential neighbor, inviting an involved member(s) of the community to join the Board may bridge this gap and bring fresh perspectives to the Board.

Benefits:

- Forge a relationship between the neighborhood and the Fort, one that does not currently exist
- Reach a previously untapped market of visitors and volunteers
- Deter members who do not pull their weight from remaining on the board

Board Recommendation 4: Increase Membership Fees for Board of Directors and Open a Free or Low-Fee Position to a Student

Task: Considering raising Board membership fees to the \$1,000-\$2,000 range. Offer one free or low-cost Board of Directors position to an undergraduate or graduate student, but may not have the ability to pay the standard fee.

Benefits:

- Increases incentive for engagement due to greater personal investment
- Increase revenue for FMOD
- A young friend, such as a student or recent graduate, may bring new ideas to the table, have time to dedicate to the site, and introduce a new demographic audience to Fort Mifflin through their personal connections.

Board Recommendation 5: Implement 3-Year Terms for Board of Director

Task: Instead of allowing Board of Directors to serve indefinitely, restrict terms to a three-year period and require reelection to the Board of Directors at the time. In addition to terms, consider restricting the number of consecutive terms (i.e. three) that a member can serve, with a required one-term break before reelection if the member wants to return to the Board.

Benefits:

- Inactive members will not be re-elected following their term
- After a member has served a set number of consecutive terms, requiring a break the length of one term prevents members from "burning out."

(VIII) STAFFING PLAN

Looking to the future, the staffing plan proposes ideal positions and candidates for FMOD's Executive Director to consider hiring as support staff, either as organization sustainability increases or as a means for reaching the goal of increasing organization sustainability. First, the position of a fulltime Grant Writer is proposed to ease the burden of locating for and applying for grants, a tedious process and secondly, the position of a Marketing/ Out-Reach Coordinator.

Recommended Additional Staff Positions

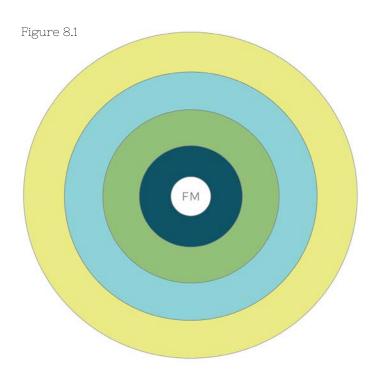
Position	Grant Writer, Full-Time
Hiring Time-Frame	FY 2018
Ideal Candidate	5 years minimum experience Track record obtaining and writing successful for grants for organiza- tions that pose a comparable challenge (i.e. a historic site or an organiza- tion with similar operational limitations)
Tasks	Work directly with Executive Director and Site & Programming Manager to obtain funding to sustain current programming or carry out envision programming/projects
Trial Period	6 months to 1 year

Position	Marketing/Out-Reach Coordinator, Part-Time
Hiring Time-Frame	FY 2019-20
Ideal Candidate	Highly motivated and creative individual with previous marketing expe- rience and knack for developing inexpensive, out-of-the box marketing methods
Tasks	Develop a simple way to gather information about visitors (i.e. collecting zip codes to gather demographic data and determine which areas/re- gions to target with marketing) Increase Fort Mifflin's visibility while working with limited resources
Trial Period	6 months to 1 year

08 Stakeholders

METHODOLOGY FOR IDENTIFYING STAKEHOLDERS

With its long history and complex relationship with both the historic and present urban context, stakeholders at Fort Mifflin are important partners for the long-term sustainability of the site as well as the ability of the staff to form a cogent management plan for engaging a variety of interests. As such, the identification of stakeholders and their relationship to the site is a crucial aspect of understanding Fort Mifflin's significance. To begin, stakeholders were identified to determine which governmental agencies and bodies, organizations, and individuals hold the power to make decisions, the ability to influence change, maintain an invested interest in or retain a high degree of involvement with Fort Mifflin. During an initial brainstorming session, all possible stakeholders were identified and this list was refined. Then, stakeholders were placed into four specific categories: (1) Internal Stakeholders, (2) Secondary Groups, (3) Beneficiary Partnerships, and (4) Periphery



INTERNAL STAKEHOLDERS

Stakeholders with direct access to Fort Mifflin's internal organizational structure that can influence decision-making.

SECONDARY GROUPS

Stakeholders that have the potential to influence decision-making at Fort Mifflin, but are not privy to the day-to-day operations.

BENEFICIARY PARTNERSHIPS

Stakeholders with no direct involvemen in Fort Mifflin's operations or organizational decision-making, but their relationship with Fort Mifflin enhances both parties.

PERIPHERY INTERESTS

Stakeholders with no direct involvement in Fort Mifflin's operations or organizational decision-making, but have an interest in Fort Mifflin's continued existence. Interests. To help understand the relationship of these groups of stakeholders to the site, stakeholder relationships to the site were organized into a series of concentric rings moving outward from Fort Mifflin at the center, representing the theoretical impact and involvement of certain stakeholders on the operations and organization of Fort Mifflin (Figure 8.1).

Internal Stakeholders (Figure 8.2) are those stakeholders with direct access to Fort Mifflin's internal organizational structure and short- and long-term decision-making. Secondary Groups (Figure 8.3) are stakeholders that have the potential to influence decision-making at Fort Mifflin but are not necessarily privy to the site's day-to-day operations. Beneficiary Partnerships (Figure 8.4) consist of stakeholders with no direct involvement in Fort Mifflin's operational or organizational decision-making, but nevertheless maintain a relationship with the site that benefits or has the potential to benefit both the stakeholder and the site. Periphery Interests (Figure 8.5) are stakeholders with no direct involvement in Fort Mifflin's operational or organizational decision-making, but benefit in some way from the existence of the site, and so have an interest in Fort Mifflin's continued operation.

Because these relationships only indicate the way in which stakeholders interact with the site on a relational level, another chart was developed to map the actual influence of specific stakeholders on the decision-making of the site (Power) versus their level of involvement at the site (Involvement). This second chart is important because a stakeholder's theoretical ability to impact the site does not necessarily reflect in their actual relationship to the site and helps to understand which stakeholder relationships need to be examined closer for a larger strategy of stakeholder engagement (Figure 8.6).

A HIGH-IMPACT APPROACH TO STAKEHOLDER ENGAGEMENT AND PARTNERSHIP FORMATION

As a site with limited staff and limited resources. Fort Mifflin does not necessarily have the ability to maximally engage every potential stakeholder or development and implement programs that are autonomously able to impact every potential stakeholder interest. Because of this, in order to maximize its ability to reach and impact stakeholders, strategic partnerships are necessary. When constructed and maintained properly, partnerships with key stakeholders allow both stakeholder and site to benefit. The stakeholders receive the benefits derived from the values of the site, while the site receives the benefits of connecting to stakeholders who themselves can draw from a wider network to enhance the site. draw in additional stakeholders, and maximize visibility. This system of strategic engagement is called targeted high-impact relationship. While there is no one authoritative source for this method of stakeholder engagement, theoretical systems have been developed and implemented across a variety of fields, including education, non-profit management, and business that each use a common vocabulary for setting goals, identifying targets, and meeting needs. For example, the Seattle Public Library recently undertook development of a high-impact relationship model for expanding its own non-profit network and outreach efficacy. They defined the process in the following way:

> Communities thrive through effective partnerships. The public library is uniquely posi-

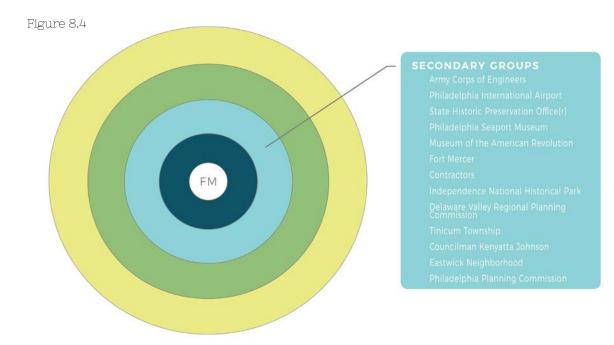
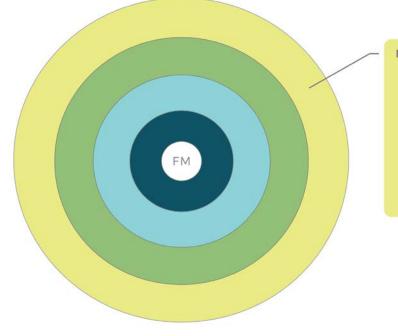
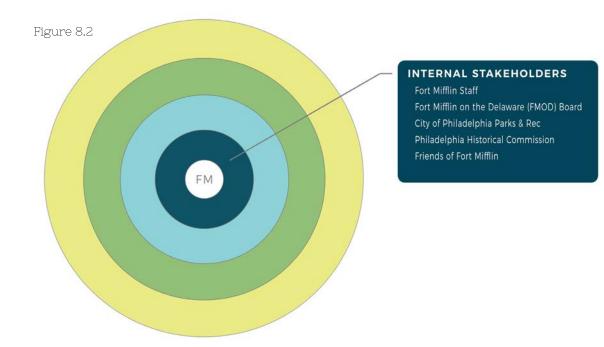


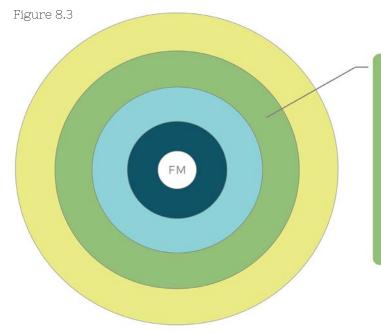
Figure 8.5



PERIPHERY INTERESTS

- Society of the Cincinatti Philadelphia Navy Yard Freemasons Event Vendors Society of the Colonial Dames John Heinz Nature Reserve Daughters of the American Revolution
- Colonial Wars
- Military Historians





BENEFICIARY PARTNERSHIPS

Veterans Croups Philadelphia Cultural Fund Connolley Access Program (Archdiocese Pennsylvania Society for the Sons of the Revolution Philadelphia Public Schools Reenactors Ed Rendell (Former Mayor/Governor) Visitors Paranormal Investigators National Park Service Boy Scouts of America tioned to foster collaborative efforts that build systems and create alliances that transform the community. Central to our strategic plan, these relationships are created on a selective basis with non-profit organizations, government agencies, commercial entities, and individuals.¹

Eric McNulty, director of research for Harvard's National Preparedness Leadership Initiative sees high-impact relationships as intentional reciprocal outreach based on an understanding of the needs of both organizations leading to development of strategies that maximize impact while minimize strain on the resources of leadership. McNulty writes, "Effective relationship design is a two-way conversation...Creating the conditions in which creativity and collaboration are emergent properties of the larger system, the organization's culture, is as much a result of your behavior as the rules you set... Even when you are in a position of little power, you can still make intentional choices about your leadership platform governance and function."²

Acumen, a multinational non-profit founded in 2001 with the goal of connecting poor global communities to philanthropists and corporations looking to be involved in the fight against poverty uses the term "venture partnerships" to define high-impact relationships. However, like other examples, Acumen lays out the essentials of high-impact relationships as beginning having strategic intent when identifying goals, maximizing fewer more meaningful goals, transparency amongst partners in regards to the relationship, flexibility specific approaches to meeting needs, and diversification of stakeholders.³

METHODOLOGY TO DEVELOPING A HIGH-IM-PACT RELATIONSHIP MODEL FOR FORT MIFFLIN

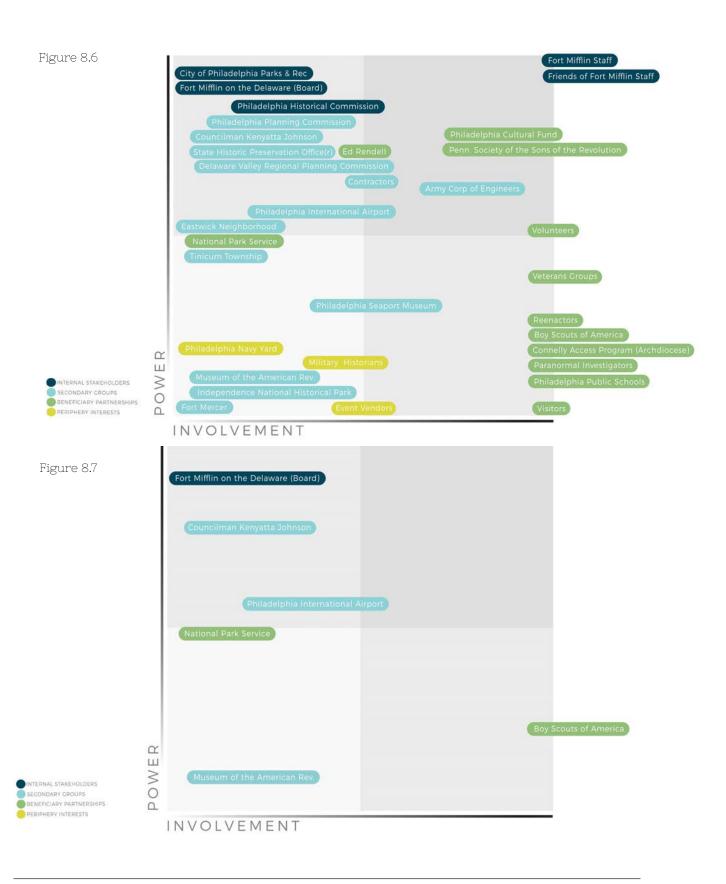
Using these and other examples of high-impact relationships, stakeholder partnership building at Fort Mifflin must begin with clear definitions of what it means to implement a high-impact system in regards to the site's stakeholders. In the context of Fort Mifflin, a high-impact model focuses upon community needs to develop a vision of engagement based upon targeted strategic relationships with stakeholders who benefit from and are a benefit to the site in order to maximize impact in meeting the needs and vision of the site. The methodology for this approach is two-fold. First, identify strategic stakeholders ("targets") upon whom resources will be expended to form, maintain, or transform existing partnerships into high-impact relationships. Second, communicate with target stakeholders to develop a vision based on reciprocal relationships designed to maximize the ability of the site to meet needs.

IDENTIFIED STRATEGIC STAKEHOLDERS

Using the charts developed to identify stakeholders, stakeholders with a high degree of potential influence or power at the site who were not currently engaged to their full potential were identified as potential strategic stakeholders based upon who is believed to benefit the site most, while also in turn benefiting from the site most (Figure 8.7). The following stakeholders were thus identified:

¹ Seattle Public Library, "Building Strategic Partnerships for High Impact," Urban Libraries Council, accessed November 01, 2017, https://www.urbanlibraries.org/building-strategic-partnerships-for-high-impact-innovation-885.php?page_id=281. 2 Eric McNulty, "Are You Intentionally Designing Your Leadership Relationships?" O'Reilly, accessed November 01, 2017, https://www.oreilly.com/ideas/are-you-intentionally-designing-your-leadership-relationships.

³ Andrew Ng, "Models of High-Level Partnerships with Social Enterprises: Venture Partnerships," Acumen, accessed November 01, 2017, https://acumen.org/blog/venture-partnerships.



Councilman Kenyatta Johnson: Kenyatta Johnson is a former state representative who now serves as the elected representative of Philadelphia's 2nd District on the Philadelphia City Council, which represents the Eastwick neighborhood that includes Fort Mifflin and the surrounding area. Johnson, a Philadelphia native, defeated a suburban real estate developer for the position on the council. As such, his election has been interpreted as a triumph for community-focused interests over corporate interests.⁴ In this capacity, Councilman Johnson has focused his office's energy on developing community spaces that promote healthy recreation and education for his district's communities, which are amongst the poorest in the city. Johnson has lobbied for increased support for parks and greenspaces.⁵ A high-impact relationship with Johnson would bring both the Eastwick neighborhood and a voice to the Philadelphia City Council. With Eastwick being Fort Mifflin's neighborhood, and the city its owner, Councilman Johnson represents a potential to influence several groups of stakeholders necessary for the sustainability of the site. Councilman Johnson has a history of lobbying Philadelphia Parks and Recreation for increased budgets to important community gathering spaces like schools, playgrounds, and community centers. Though he does not currently have a strong relationship with

the site, and establishing one may take a bit of work on the part of the Fort Mifflin board and staff, an ongoing relationship with him may bring some relief to the site as well as bring positive addition to it from the surrounding community.

The Fort Mifflin on the Delaware (FMOD) Board: Fort Mifflin's board is a voluntary organization made up of 25 individuals who serve based on interest in or passion for the site. Members of the board include lawyers, philanthropists, historians, concerned citizens, preservationists, and representatives of nearby organizations like the Philadelphia International Airport (PHL). The board thus has a unique combination of interest in the site, influence over its decision-making, and access to many other stakeholders in the city. However, according to Fort Mifflin's director, Beth Beatty, the board has not been very active in the day-to-day needs or operation of the site, typically meeting only twice a year and having very little follow up on developed strategies, preferring to allow Beatty to handle the burden alone. With representatives from places like the National Park Service, the Philadelphia International Airport, and several area preservation and design firms, engaging the board and developing strategies for their increased involvement in the site not only benefits the site through better connection to its leadership, but potentially benefits the board's own stakeholder groups through increased usage of the site to meet their own needs. Additionally, the Fort Mifflin Advisory

⁴ Mensha M. Dean, "Incumbents survive in two contested district council races," The Philadelphia Inquirer, May 20, 2015. 5 Philadelphia City Council,"Councilman Kenyatta Johnson: District 2," accessed November 01, 2017, http://phlcouncil.com/ KenyattaJohnson.

Board, a non-voting oversight party within the board structure, has room for additional members drawn from targeted stakeholder groups such as students, minorities, Eastwick residents, scouts, or re-enactor groups. Involving additional stakeholders at this level may lead to additional diversification and engagement on the main board as well as provide some relief to aging board members who are worried about their future legacy or replacement.

Ed Rendell: Former mayor of Philadelphia and former governor of Pennsylvania, Ed Rendell used Fort Mifflin in the past as part of his campaigns for office and supported the site throughout his career in both.6 Recently, Rendell joined the board of the Museum of the American Revolution, saying, "[The Museum] is an important step in the telling of the story of Philadelphia and the shaping of this country."7 As an important site in the Revolutionary War, Fort Mifflin represents one of a network of Revolution sites in the Philadelphia region which the Museum now hopes to represent. Since Rendell has supported the site in the past, a renewed relationship with him would also bring in-roads to the Museum of the American Revolution, benefiting the museum by giving it access to a Revolutionary site with a high degree of integrity, while also allowing Fort Mifflin to have a presence near Independence National Historic Park where the museum has the

Philadelphia International Airport (PHL): As Fort Mifflin's largest neighbor, the Philadelphia International Airport, which has runways only 1000 feet from the site, is an omnipresence at Fort Mifflin. With approximately 130,000 planes flying over or near Fort Mifflin a year, the airport has already been involved with the site in implementing sound dampening to insulate frequently populated internal spaces of the Fort from the 75dB roar of the airplanes which traverse the site at a rate of one per minute. However, PHL also has a history of promoting the site in its displays in its terminal. Indeed, Terminal D of the airport faces directly out towards Fort Mifflin. Diego Rincon, Deputy Director of Aviation-Capital Development for PHL serves on the Fort Mifflin board already, and according to Beth Beatty, the airport is very interested in developing new ways of engaging Fort Mifflin, though none have developed thus far. A high-impact relationship with the airport would benefit the airport by giving them access to the site directly or indirectly, which may serve their customers in a variety of ways; and it serves the site by giving it access to the 400,000 people the airport serves annually, as well as a voice to the physical needs of the site in regards to any future mitigation necessary due to airplanes or airport expansion plans.

National Park Service (NPS), Northeast

⁶ The Philadelphia Inquirer, "Flag Day Open House at Fort Mifflin," The Philadelphia Inquirer, June 13, 2003: W47. 7 Stephan Salisbury, "Uprising," The Philadelphia Inquirer, July 17, 2015: B01.

potential to reach many more visitors than might normally be directed to Fort Mifflin's isolated location

Regional Office (NERO): The National Park Services does not own or operate Fort Mifflin, but it does have an advisory role in the site, as the site is a surplus property of the National Park Service. As part of the original agreement in 1971, the NPS is supposed to conduct annual inspections and give recommendations to the city in regards to the condition and maintenance of the site. However, interpersonal conflict between the city and NPS in the early 1990s resulted in the suspending of relationships with Fort Mifflin for almost 30 years. More recently, Amanda Casper, historian for the NPS's Northeast Regional Office, has been leading an effort to re-engage the city and re-establish a positive on-going relationship with Fort Mifflin again. In addition, Paul Kenney, a NERO representative, serves on the Fort Mifflin board. With other important Revolutionary sites like Valley Forge and Independence National Historic Park operated by NERO, a high-impact relationship benefits both parties by re-establishing a previously impactful and positive relationship between Fort Mifflin, the NPS, and the associated personnel and regional sites. Recently, Fort Mifflin entered into a partnership with the NPS to be a part of the Washington-Rochambeau National Historic Trail. According to the executive director of the Fort, this is expected to bring in \$30,000 a year for three years, allowing to Fort to host programs that it may not otherwise have been able to.8 Fostering

this new relationship with the NPS may bring further opportunities to the site.

Boy Scouts of American (BSA): The BSA has been using the Fort Mifflin site regularly since the 1960s to educate its scouts, host camping programs, and provide an avenue for service projects. However, currently, there is no on-going relationship with a specific BSA troop. Rather, BSA troops who wish to use the site contact the staff and arrange to participate in a pre-developed program that can include service projects, site visits, or sleep overs. Eagle Scout hopefuls have participated in service projects at the site in the past, such as installing garbage cans and bird houses, and there is room for more service projects in the future. A high-impact relationship with the BSA would focus on developing intentional relationships with specific troops so that Fort Mifflin becomes a partner with troops rather than a passive recipient of incidental troop interest in the site's programming. This kind of relationship benefits the troops in question by providing a stable environment for scouting education and service projects, and benefits the site by granting it access to a stable pool of potential volunteers and youth who themselves will grow up to remember the site and engage others. The Girls Scouts of America currently have no relationship with the site, but the same principles that apply to the BSA could easily translate to the GSA with similar result.in the day-today needs or operation of the site, typically meeting only twice a year and having very

^{8 &}quot;Second Interview with Executive Director Elizabeth Beatty," Interview by Anne K. Albert and Anthony R.C. Hita, November 12, 2017.

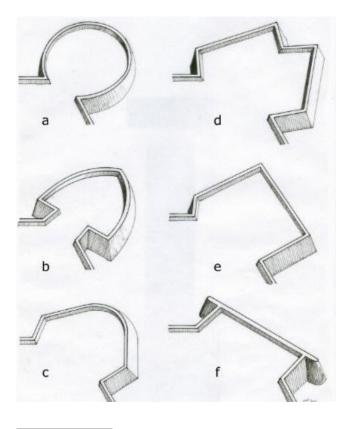
little follow up on developed strategies, preferring to allow Beatty to handle the burden alone. With representatives from places like the National Park Service, the Philadelphia International Airport, and several area preservation and design firms, engaging the board and developing strategies for their increased involvement in the site not only benefits the site through better connection to its leadership, but potentially benefits the board's own stakeholder groups through increased usage of the site to meet their own needs. Additionally, the Fort Mifflin Advisory Board, a non-voting oversight party within the board structure, has room for additional members drawn from targeted stakeholder groups such as students, minorities, Eastwick residents, scouts, or re-enactor groups. Involving additional stakeholders at this level may lead to additional diversification and engagement on the main board as well as provide some relief to aging board members who are worried about their future legacy or replacement.

O9 GLOSSARY OF FORTIFICARTION TERMS

The following glossary is intended to help explain some of the terminology used in this report. While far from comprehensive, it explains the significant features of fort technology that you will find at Fort Mifflin. Because the idiosyncrasies of site and variable skills and intentions of fort builders, the elements at any given fort may differ significantly from another in form though not in function. For that reason, typical visual examples accompany the textual definitions in the right column. For a more complete list, consult Cyril M. Harris' Dictionary of Architecture and Construction and the Multilingual Fortification Dictionary of the International Fortification Council, from which these examples were taken.^{1 and 2} There are many other sources available, both physical and digital, that focus on the history of technology involved in fortification design.

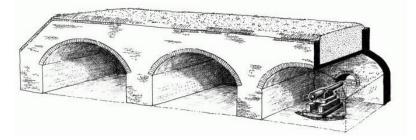
Definition Example

Bastion: A defensive work, round, rectangular, or polygonal in plan, projecting from the outer wall of a fortification, principally to defend the adjacent perimeter.



^{1.} Cyril M. Harris, Dictionary of Architecture & Construction (New York: McGraw-Hill, 2000).

^{2.} International Fortress Council, "Multilingual Fortification Dictionary," accessed November 2, 2017, http://www.internationalfortresscouncil.org/mfd.html.

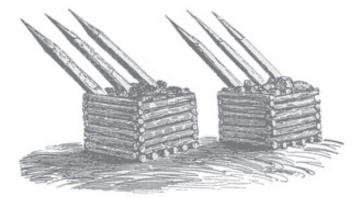


Casemate: A vault or chamber in a bastion, having openings for the firing of weapons. (see 8.1 below)

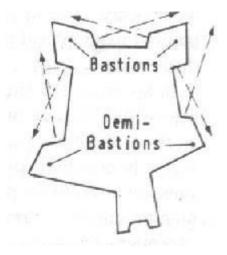


Example of a casemate at Fort Mifflin.

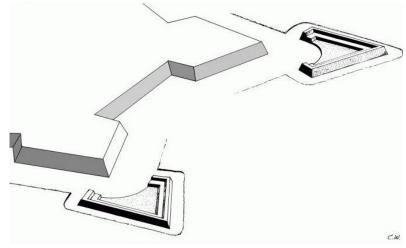
Cheval (Chevaux) de Frise: A defensive measure that usually consists of a frame and projecting spikes.

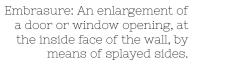


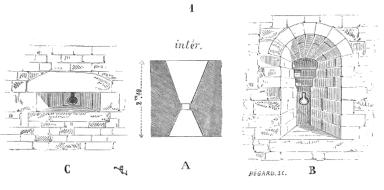
Demi-Bastion: A partial bastion with only one defensive side.



Demilune (Ravelin): In fortifications, a projecting outwork forming a salient angle. (see Figure 8.2)







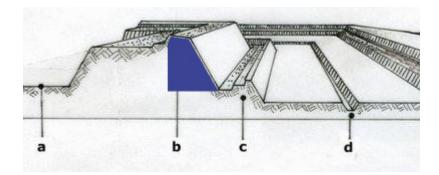


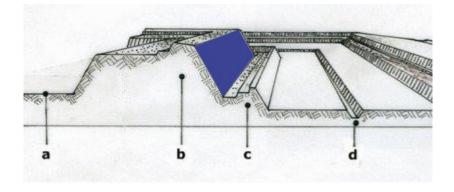
Embrasures in the walls at Fort Mifflin.



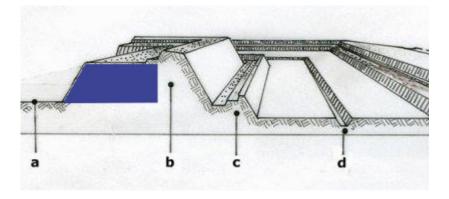
Magazine: A storage place for ammunition and explosives.

Rampart: An elevated earthen wall for the purposes of defense, located on the inner side of a ditch.





Scarp: A steep slope constructed as a defensive measure in a fortification.



Terreplein: An earth embankment, flattened at the top.

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	written historical and descriptive data, supplemental docu-
	mentation) National Park Service, U.S. Department of the
	mentation) Inational Park Service, U.S. Department of the

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Historia	c American Buildings Survey. "Fort Mifflin,
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	National Park Service, U.S. Department of
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