Conditional Assessment of an Historic Resource

Fort Warren
Boston Harbor Islands National and State Park

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Location

[Map of Boston Harbor Islands State Park showing various islands and locations such as Castle Island, Thompson Island, South Boston, and others.]

[Logo for DCR Massachusetts]
Location

Origin and Civil War Period
History

Origin and Civil War Period

- Built from 1833 to 1861
- Third System Fortification
- 5th largest of the 42 third system forts
- Served as a prison
History

Post Civil War Period - WWII

• WWI - Headquarters for Boston Coast Defenses
• WWII - served as control center for Boston Harbor's south mine field
History

Evolving Fort
History

Evolving Fort
Overview

- Became park 1961
- Owned and managed by MA DCR
- 100k visitors/year
Assignment

Conduct inspections and observations of:

- Casemates and rooms
- Windows
- Sea walls
- Terrepleins
- Site elements
- Interior systems
- Utility systems
Issues

Weather Penetration

• Windows
• Doors
• Chimneys
• Terrepleins
Issues

Structural Degradation

- Settling
- Shifting
- Cracked masonry
- Ice damage
- Unsafe floor joists
Issues

Sea Wall Degradation
Issues

Sea Wall Degradation
Issues

Safety and ADA Access - Railings

- Drop-offs
- Fence openings
- No Fencing
- Tripping hazards
Issues

Safety and ADA Access - Stairs

- Cracked concrete
- Weak structures
- Unsafe railings
Data Collection

Location Challenges

- Island Location
- Power
- Weather
- Underground Spaces
- Hazards
Data Collection

Approach and Methodology

- Collector for ArcGIS
- Develop feature classes first
- Developed an inventory scheme
- Attribute coded domains
Reference Materials

Georeferenced 75+ Historic Plans
Reference Materials

Georeferenced 75+ Historic Plans
Data Collection

Casemates and Rooms
Data Collection

Windows
Data Collection

Structural Observations
Data Collection

Over 3,000 Features and Associated Images
Results

Mapping - ArcGIS
Results

Reporting – MS Access

APPENDIX H
Assessment of Conditions – Fort Warren
18.017/767.00
Page 1

INTERIOR OBSERVATION SUMMARY

Casestudy ID: 1011
Casestudy Name: Recreation Building and Theater
Level: Upper level
Exterior Windows: 1
Int. Windows: 0
Floor Type: Concrete
Ceiling Condition: Fair
Access to Public: Yes
Historic/Electricity: No
General Notes:

APPENDIX G
Assessment of Conditions – Fort Warren
18.017/767.00
Page 4

WINDOW OBSERVATION SUMMARY

Window ID: W115-01
Casestudy ID: 115
Level: Main Level
Orientation: Outside
Size: Other
Type: Fixed
Status: Bricked or Closed
Condition: Fair
Notes: 22”x38” - concrete lintel

Window ID: W116-01
Casestudy ID: 116
Level: Main Level
Orientation: Outside
Size: Other
Type: Fixed
Status: Bricked or Closed
Condition: Fair
Notes: 22”x38”

Window ID: W112-18
Casestudy ID: 121
Level: Main Level
Orientation: Inside
Size: Other
Type: NA
Status: Open
Condition: Poor
Notes: 22”x46”

Photo 1
Photo 2
Photo 3
Photo 4
Questions?