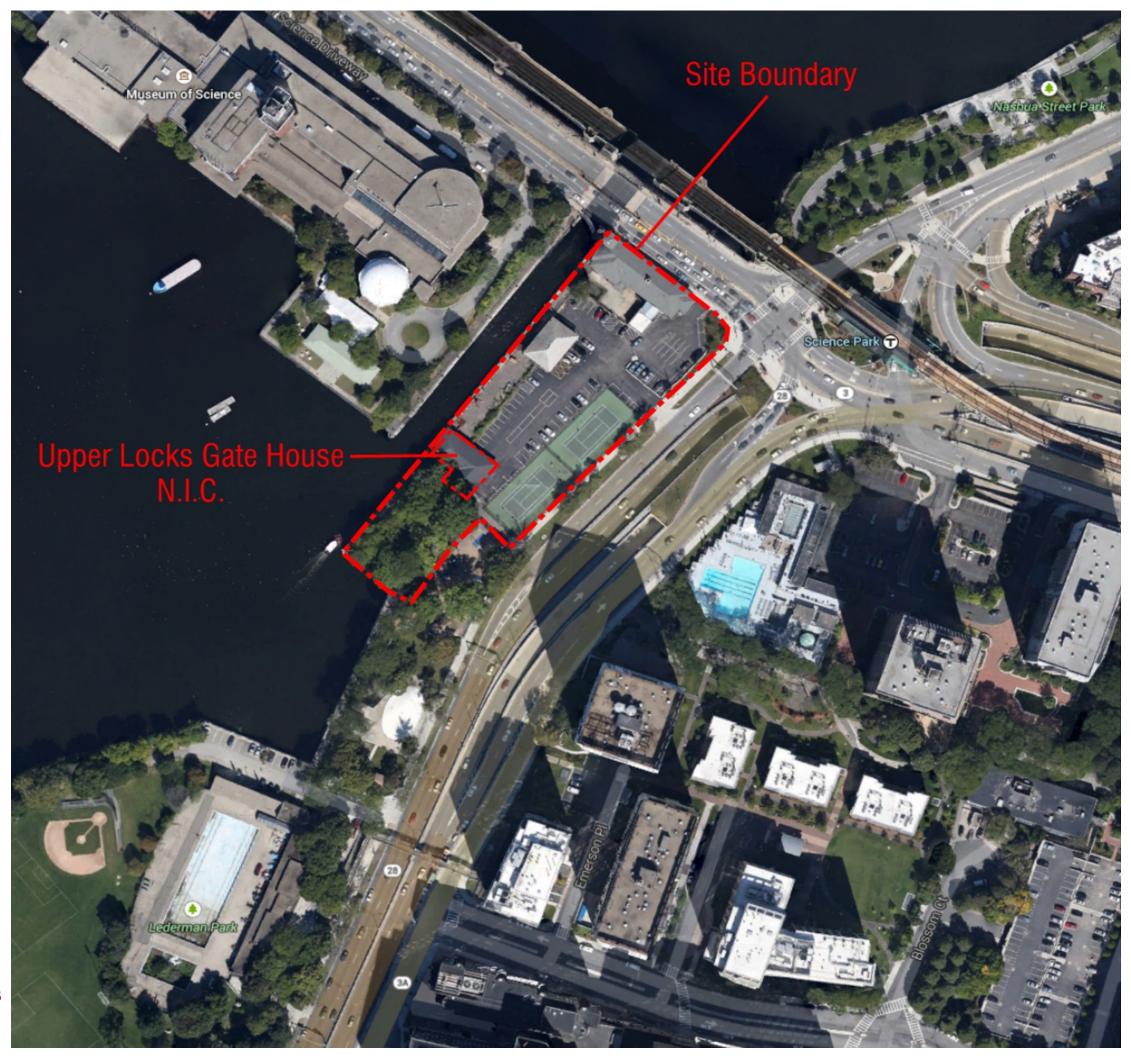
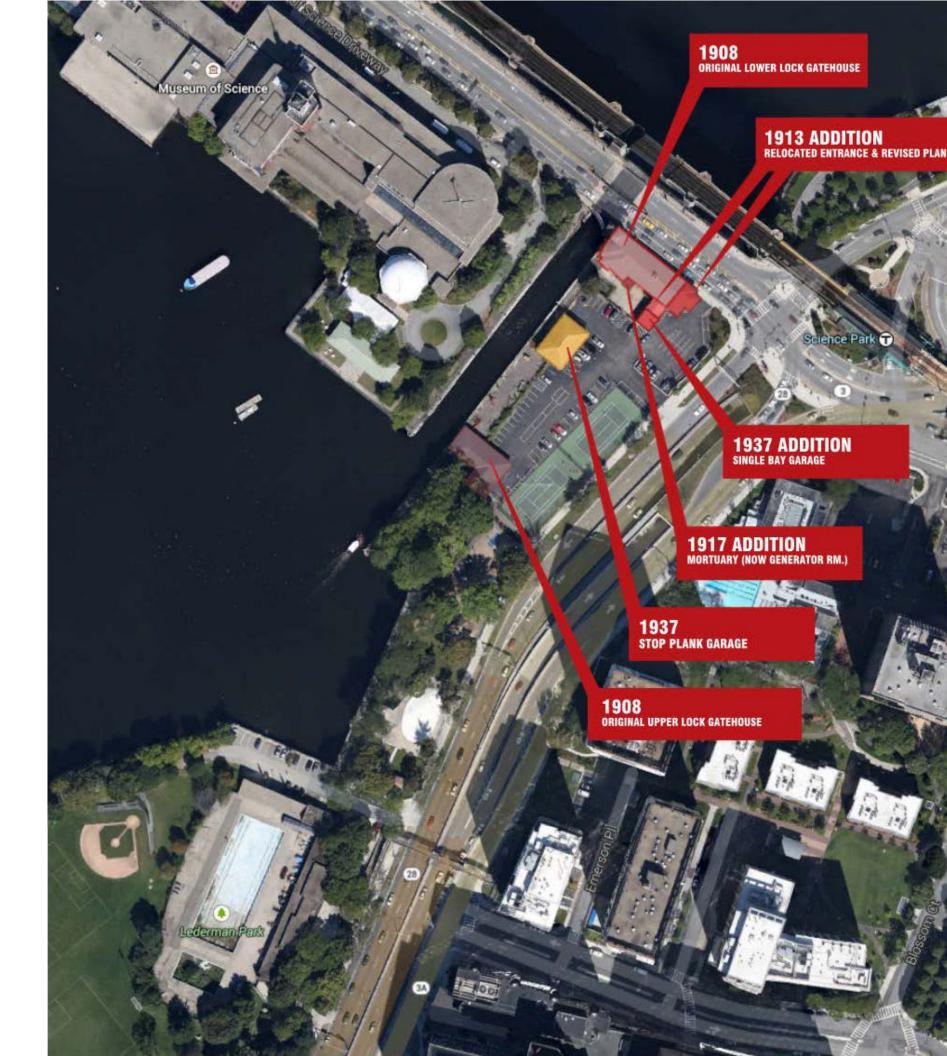


Lower Basin Barracks Modernization

June 26 2018 Schematic Design Phase

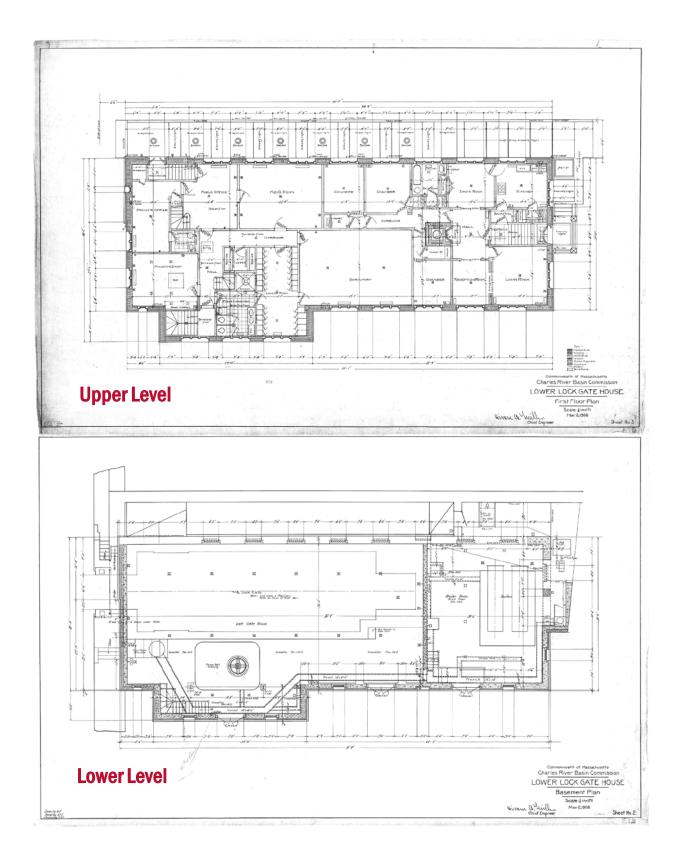


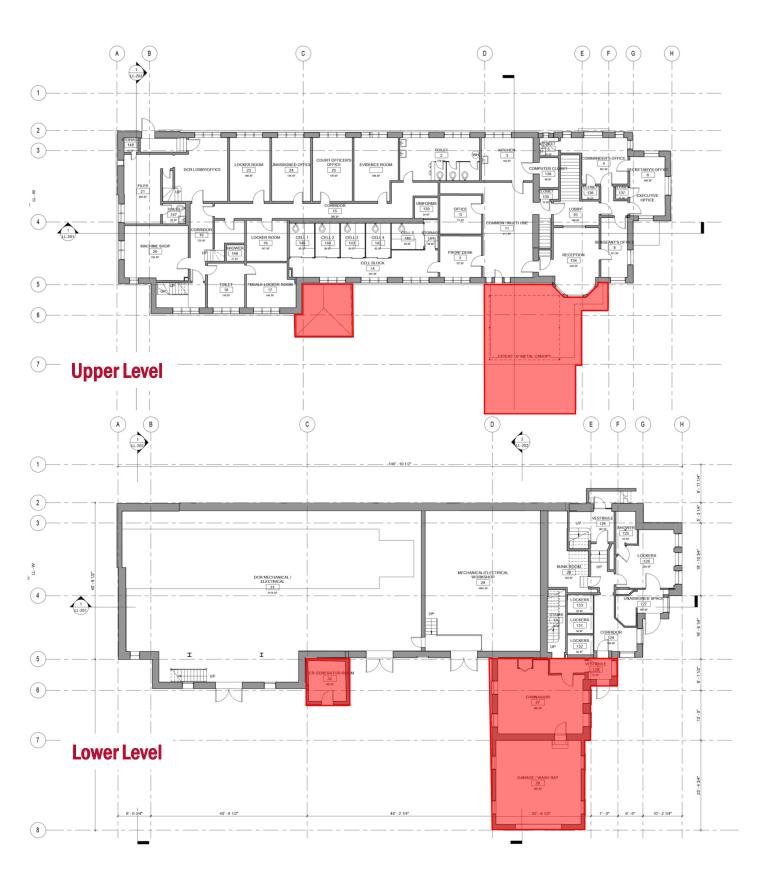












Floor Plans -- Current Building

Floor Plans – Original Design

Finegold Alexander Architects

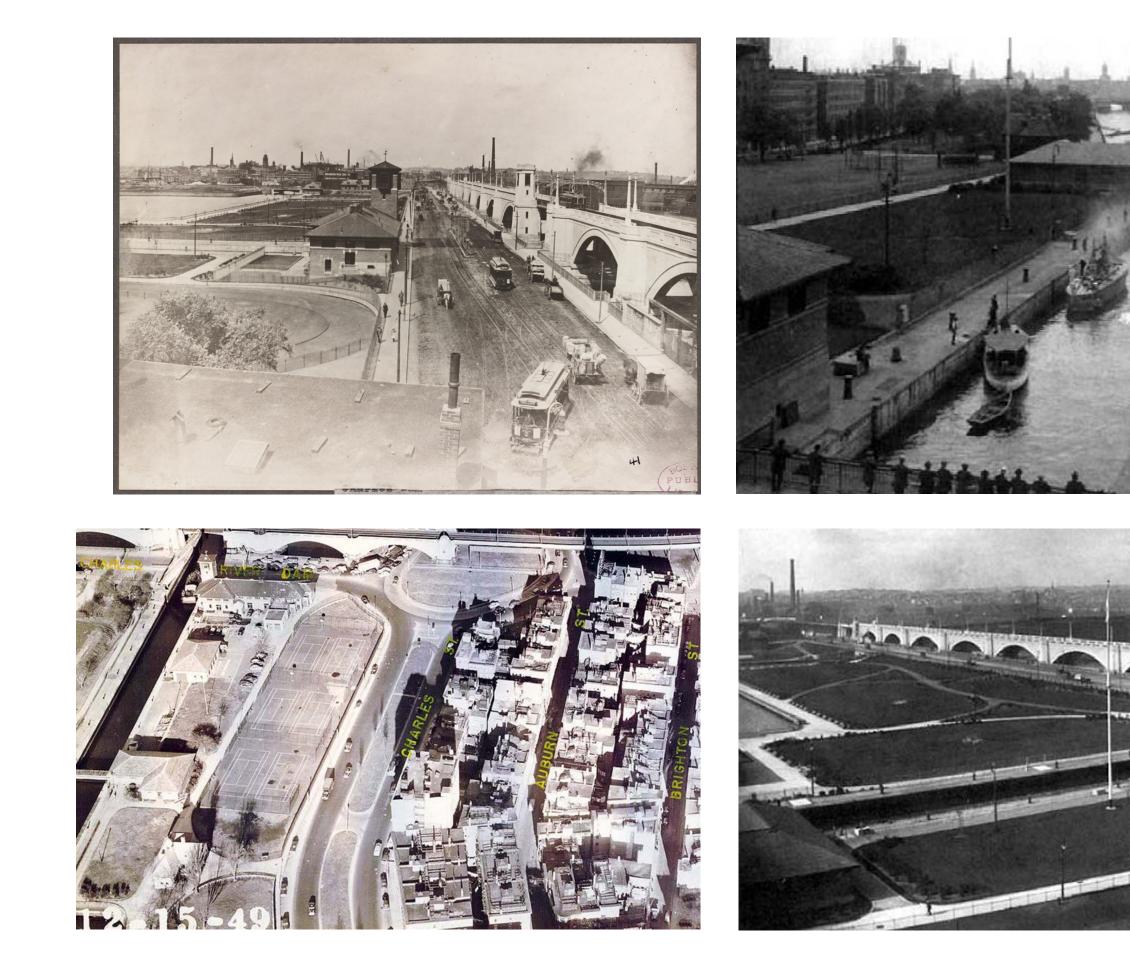




Floor Plan Information Redacted For Security Purposes

Floor Plans – Proposed

Proposed Bldg.







Site History

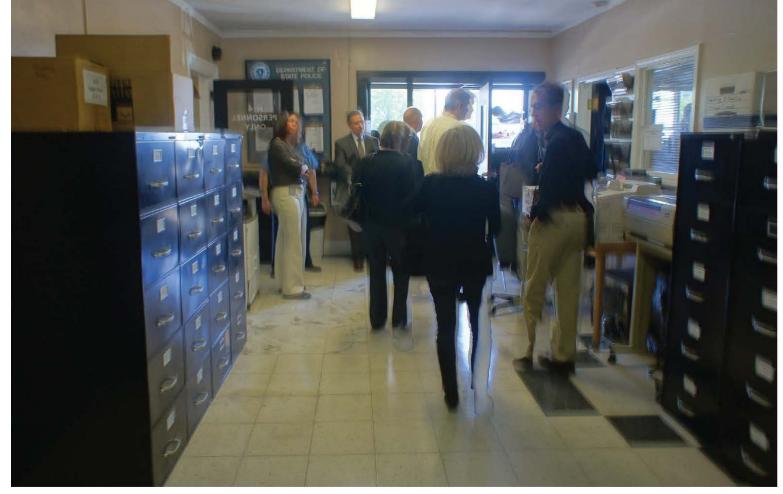




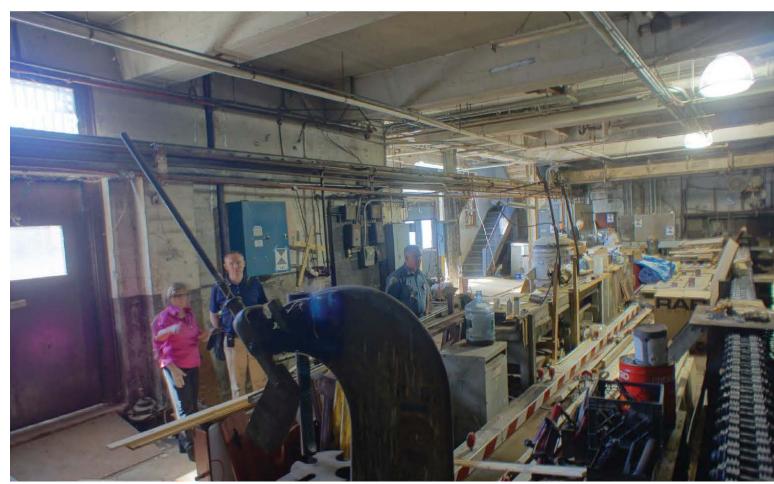




Existing Conditions









Existing Conditions

Project Purpose

- Upgrade substandard facility which is in poor condition, undersized and dysfunctional
- Expand footprint to accommodate Massachusetts State Police (MSP) H Troop consolidation and closure of Upper Basin Barracks
- Reuse and expand existing historic structure -- Lower Lock Gatehouse
- Fulfill MSP Strategic Facilities Plan (addressing locations state-wide) recommending upgraded barracks at current location to address public safety in the Lower Charles River Basin
- Project to serve as catalyst for completion of DCR's transformation of the Lower Charles River Basin and upgrading of the Lower Esplanade along the historic canal
- MSP will be a tenant in the facility which will remain under DCR control



Planning Considerations

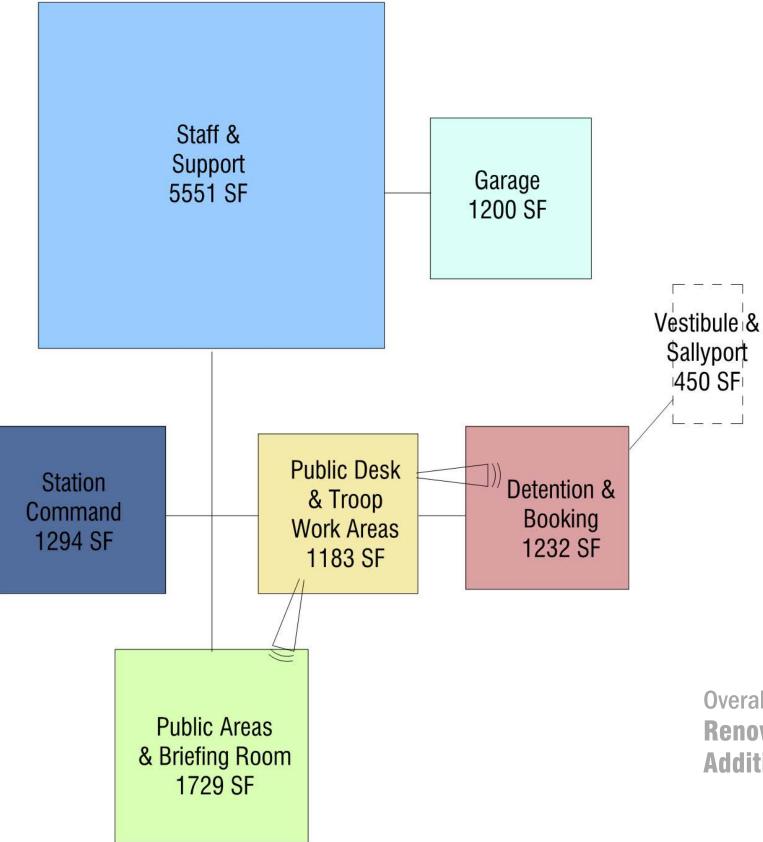
- Massachusetts Historical Commission and Boston Landmarks Commission preserve historic Lower Lock Gatehouse and restore exterior
- Chapter 91 protect waterways, support water-dependent uses and serve a proper public purpose
- Article 97 preserve, protect and enhance public parkland
- DCR Lower Charles River Basin Master Plan -- reshape the river and its banks into over forty acres of parkland, plazas, walkways, bike paths and bridges, connecting the Boston and Cambridge Esplanades to the HarborPark and the Freedom Trail
- MSP Strategic Facilities Plan consolidate and modernize the state-wide system of barracks to support the 21st Century mission requirements and ensure public safety on DCR property
- Incorporate waterfront access, recreational circulation, view corridors and landscaped open space
- Comply with Executive Order 484 and MA LEED Plus criteria

Planning & Regulatory Considerations

Site and Building Design Principles

- Design addition to respect architectural character, massing and profile of historic Lower Lock Gatehouse
- Right-size barracks and related parking to meet capacity needs of a double-station facility; addition to be a single story with an efficient layout
- Maximize parkland for public recreation by reducing existing impervious surfaces by 70 percent and reduce parking from 75 spaces to 20 spaces
- Acknowledge the site's historic uses and landscape design; relocate tennis courts and extend Esplanade character onto the site
- Integrate safe and accessible pedestrian and bicycle circulation through the project site
- Maintain pedestrian access along the water's edge and uninterrupted views of the Charles River
- Cluster MSP building, parking, and sally port to clearly delineate from public open space







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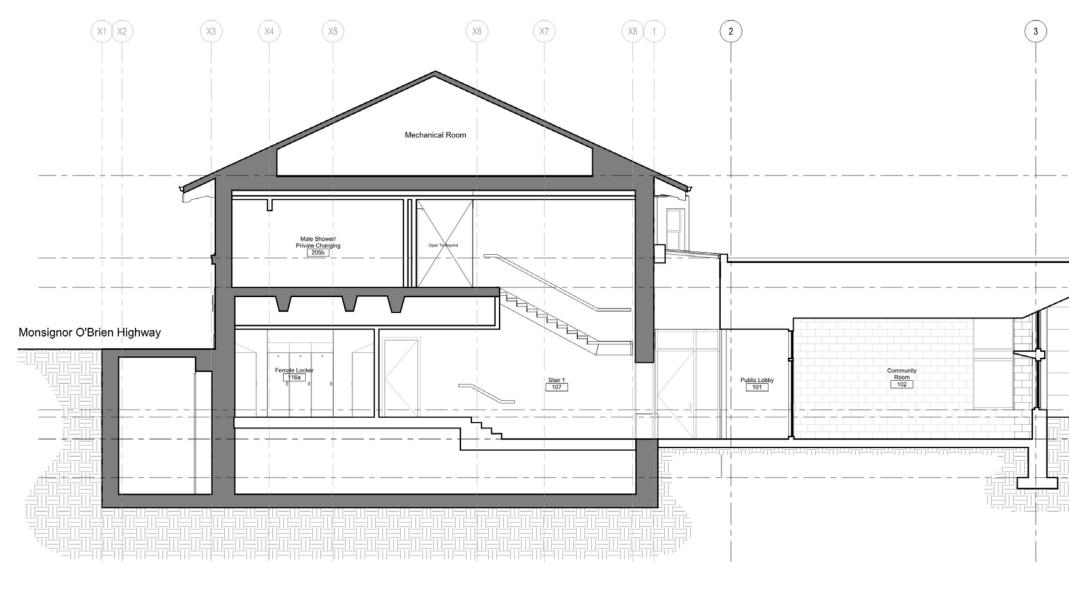
Overall facility footprint: Renovation – 15,455 gross square feet **Addition** – 4,105 gross square feet

Floor Plan Information Redacted For Security Purposes

Lower Level Schematic

Floor Plan Information Redacted For Security Purposes

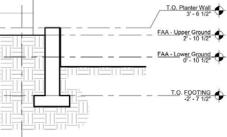
Upper Level Schematic



Building Section

Schematic

15



TO PARAPET 17'-4" FAA - First 14'-8"

FAA - Attic 24' - 10"

4





South View – From Lawn







Schematic

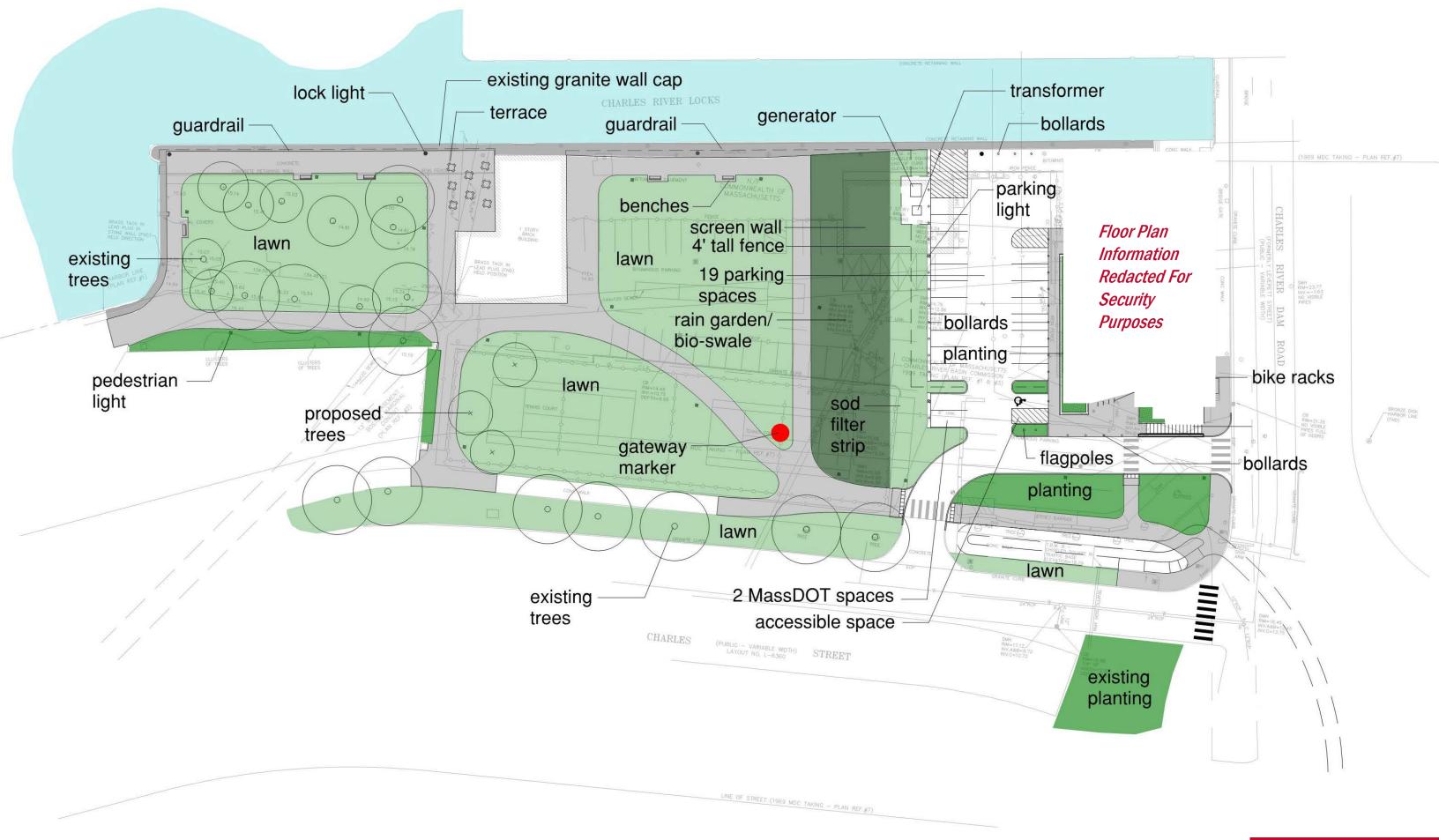
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Sketch of view from Embankment Road



Sketch of view from the canal



Site Plan









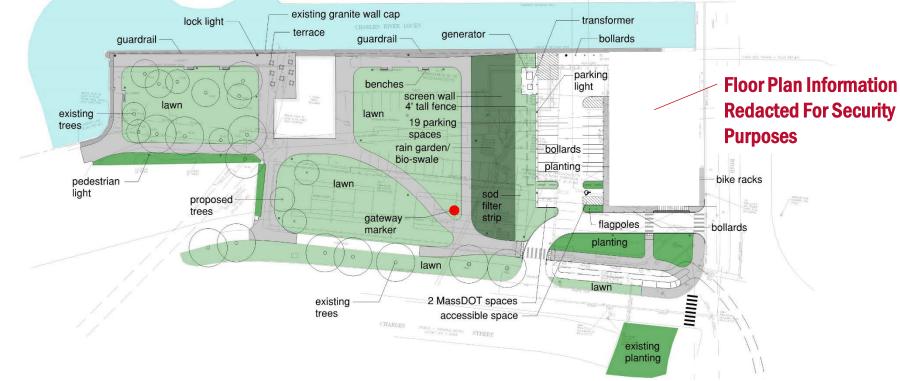


Landscape Design References









Facility: Leverett Police Station

Vulnerability: High (heat, flooding, extreme precipitation) **Risk:** High (high consequence to public health and safety)

Priority: High Priority

* Excerpt from Statewide Resilience Master Plan

Exterior Site Features and Grounds

Extensive bioretention area

 \bullet

100 year storm event in 2070

Architectural Building Components

- Extensive green roof •
- Elevated glazed openings
- Existing roof to be replaced
- Shaded south/ west facing glazing 2070

Mechanical Building Systems

- •
- Heat recovery units used •
- High efficiency VRF system
- **Elevated Cooling Towers** •

Electrical Building Systems

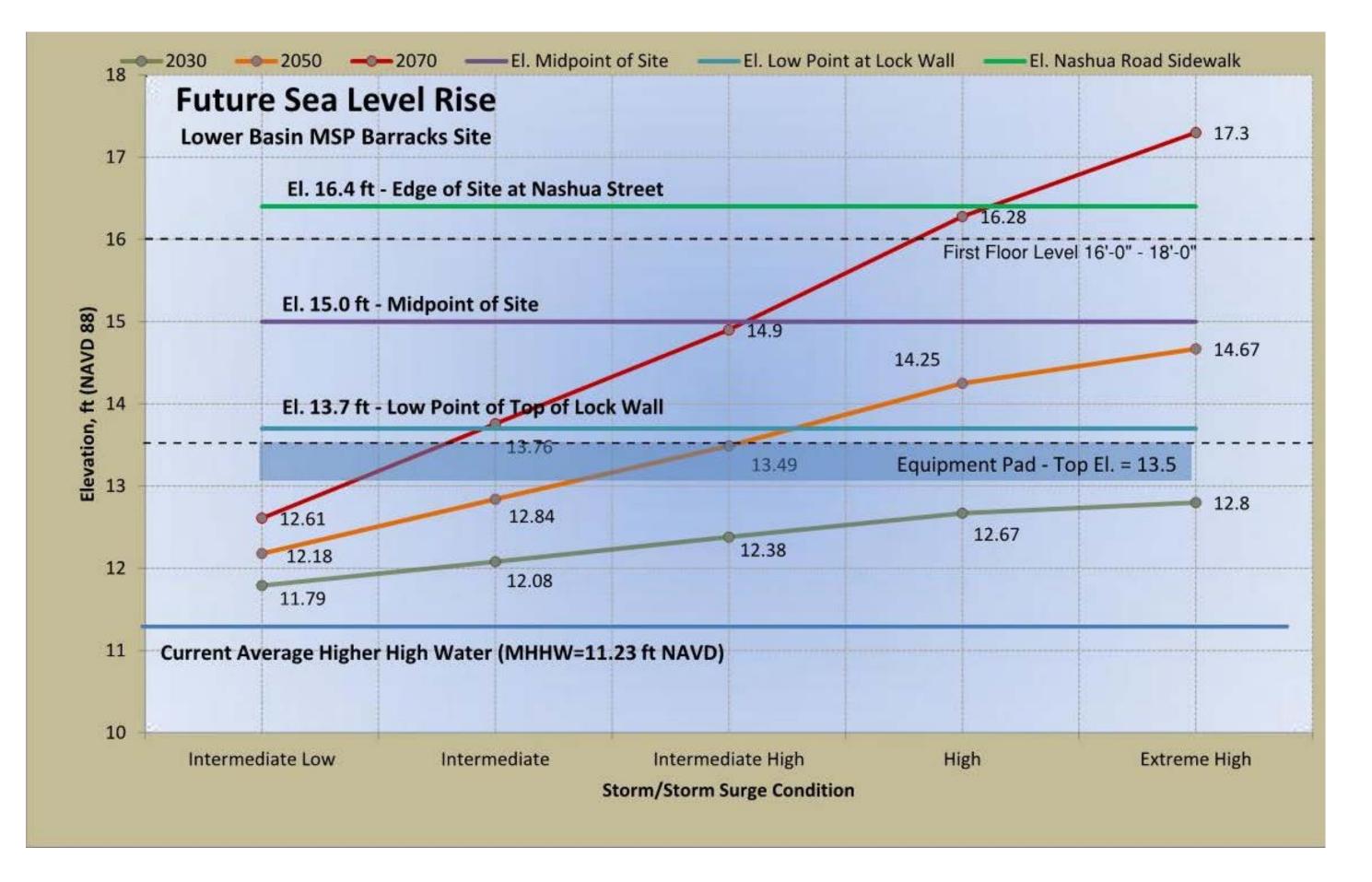
Transformer and backup generator elevated to projected

Ground Level elevated to projected 100 year storm event in

Mechanical equipment located on second floor

Electrical equipment located on the second floor

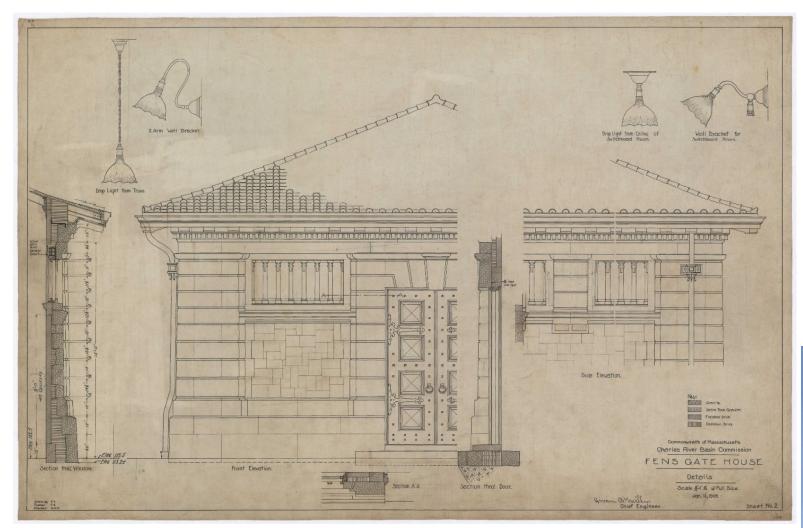
Resilience Considerations



Resilience Considerations



Repurposing of existing 1909 Fens Gatehouse to accommodate storage and maintenance functions for integrated with proposed Charlesgate bikepath







Existing Conditions

Finegold Alexander Architects

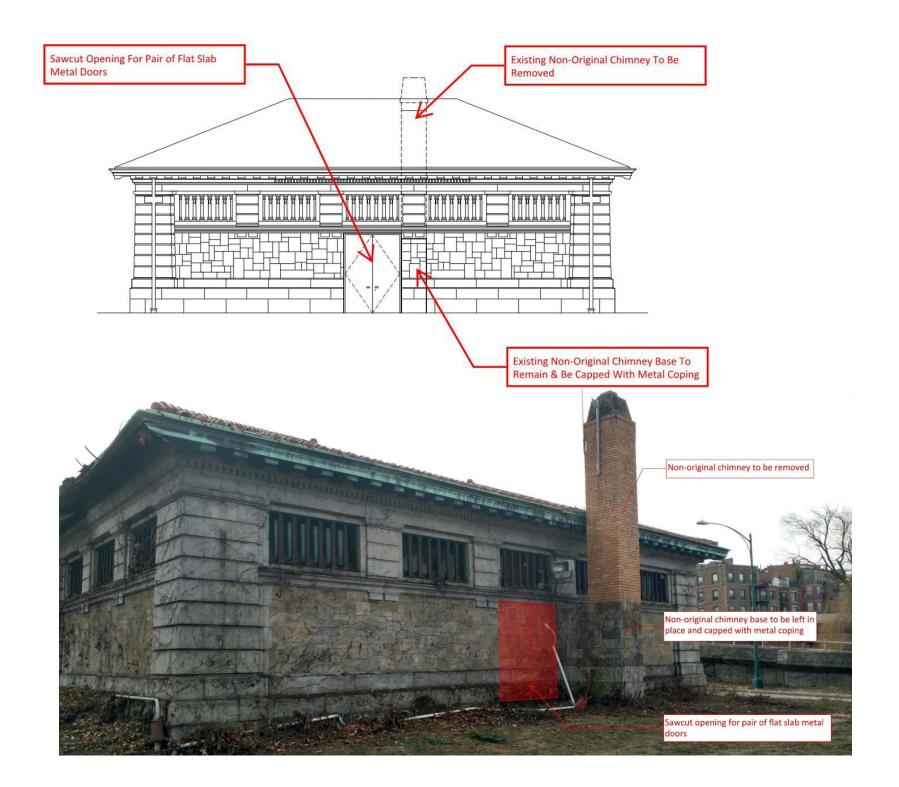
DCR Flood Control Operations group; site development

Fens Gatehouse



Site Plan

Scope includes exterior repairs, interior upgrade, removal of chimney to granite base with new adjacent double service door, and introduction of new toilet, shower and office area



Fens Gatehouse

<u>Client / Owner</u>

Massachusetts State Police DCR DCAMM

Project Partners

MassDOT MWRA Esplanade Association West End Civic Assoc. Beacon Hill Civic Assoc. Back Bay Neighborhood Assoc. New Charles River Basin Citizens Charles River Conservancy Charles River Watershed Association 2020 Work Group

Design Team

Finegold Alexander Architects Preservation Technology STV Incorporated The Green Engineer RSE Associates, Inc. Samiotes Consultants, Inc. Copley Wolff Design Group Epsilon Associates, Inc. R.W. Sullivan Engineering (Code) VJ Associates Kalin Associates Howard Stein Hudson EFI Global



Lower Basin Barracks Modernization