

DCAM & AOTC

TRC1209 ST1

SALEM PROBATE & FAMILY COURT RENOVATION



PERRY DEAN ROGERS | PARTNERS ARCHITECTS

JULY 24, 2012

TODAY'S AGENDA

1. INTRODUCTIONS

Team Experience

Experience with Relevant Historic Projects

2. PROJECT OVERVIEW

Framing the Issue: Goals and Approach

Program Development

3. HISTORIC CONSIDERATIONS

Character-defining features

4. SUSTAINABLE DESIGN

5. QUESTIONS

OUR TEAM

JULY 24, 2012

DCAM

Shirin Karanfiloglu, Director of Programming
Elayne Campos, Deputy Director
Bob Barry, Deputy Director, Construction
Ann Schiro, Project Manager
Paul Ford, Project Manager, Construction
Jeff Novak, Project Engineer

AOTC

Richard L'Heureux, Project Manager
Kim Wright, Court Administrator
Pamela O'Brien, Register of Probate

Salem Probate & Family Court

PERRY DEAN ROGERS | PARTNERS ARCHITECTS

Martha Pilgreen Principal-in-Charge
Tom McCarty Senior Project Manager
Anne Brockelman Project Manager
Ryan Senkier Project Architect

Mechanical Engineer (M/P/FP)

BVH Integrated Services
George Iskra, P.E., President
Thomas Iskra, P.E., Proj Manager

Electrical Engineer

BVH Integrated Services
Michael Pang, P.E.

Structural Engineer

Lim Consultants, Inc.
Susan Burkhardt, P.E., Principal

Civil Engineer

Nitsch Engineering
Anthony Donato, P.E., CFM, LEED AP
Tim McGivern, P.E.

Landscape Architect

Carol R. Johnson Associates
John Amodeo, ASLA, LEED AP
Johnathan Law, Associate

Specifications Consultant

Kalin Associates
Mark Kalin FAIA FCSI LEED, President

Cost Estimator

Faithful+Gould
Paul Male, Senior Vice President

MA Building Code Consultant

Rolf Jensen & Associates
Carl Nelson, P.E.

Historic Preservation Specialist

Building Conservation Associates, Inc.
Andrea M. Gilmore, Director
Cory Trembath, Sr Conservator

HISTORIC AGENCIES



MASSACHUSETTS
HISTORICAL
COMMISSION

William Francis Galvin
Secretary of the Commonwealth



SALEM HISTORICAL COMMISSION



HISTORIC
SALEM INC



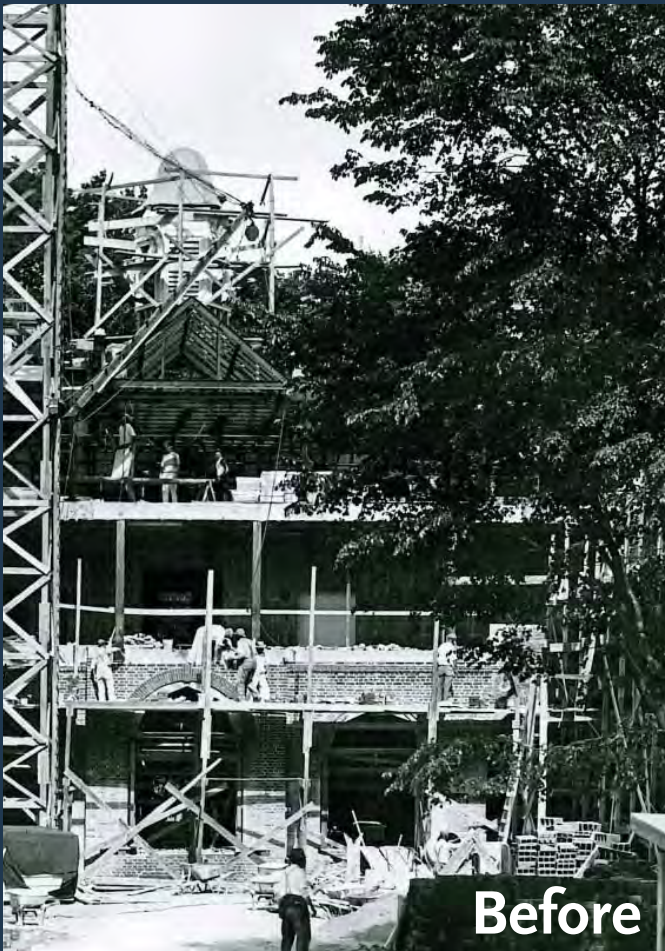
OVERVIEW OF RELEVANT HISTORIC PROJECTS

PERRY DEAN ROGERS | PARTNERS ARCHITECTS
BUILDING CONSERVATION ASSOCIATES
BVH INTEGRATED SERVICES

JULY 24, 2012

PART OF PERRY DEAN'S LEGACY

COLONIAL WILLIAMSBURG:
OVER 85 BUILDINGS RESTORED



Before



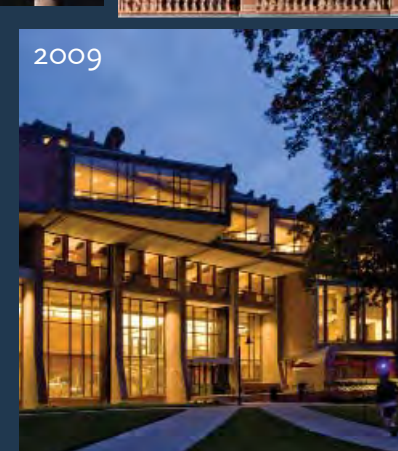
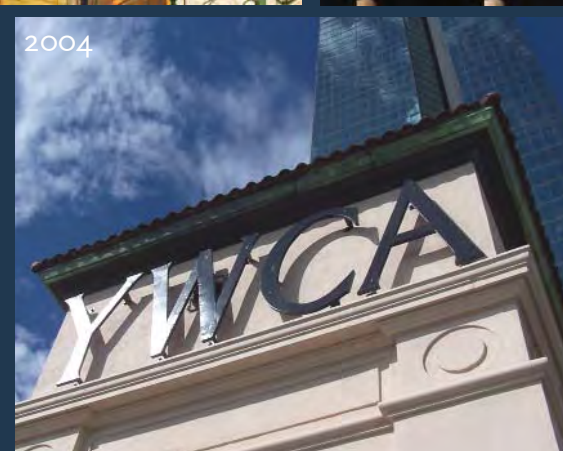
After

RELEVANT HISTORIC PROJECTS

JULY 24, 2012

99 RENOVATION/RESTORATION PROJECTS

25 PROJECTS ON THE NATIONAL
REGISTER OF HISTORIC PLACES

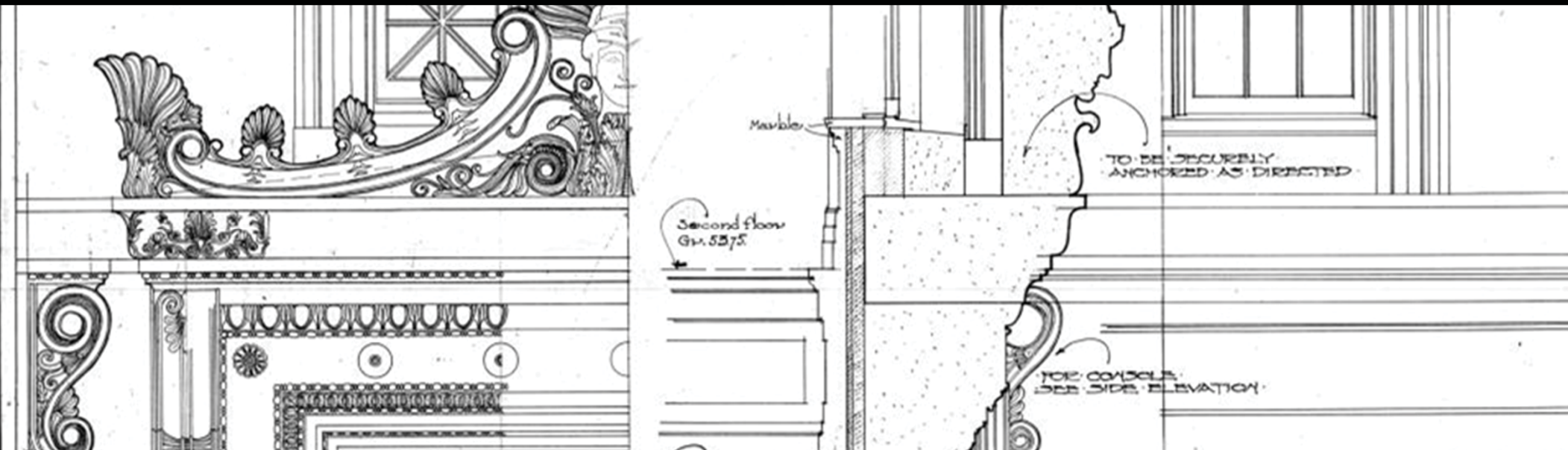


PERRY DEAN'S RELEVANT EXPERIENCE

JULY 24, 2012

Building Conservation Associates, Inc.

- Building technology firm, founded in 1985
- Specialize in the restoration, preservation, and conservation of historic buildings and works of art
- Detailed knowledge of and extensive experience in building materials
- View building preservation as a key component of sustainable and energy-efficient design
- Extensive experience with local, state, and federal historic commissions and regulations
- Conditions Assessment
- Research and Documentation
- Strategic Planning
- Restoration Design
- Materials Consultation
- Construction Administration
- Inspection Services



Selected Relevant Projects

BCA



Massachusetts State House, Boston, MA

- Comprehensive interior survey
- Historic Value Rankings of 2007 Master Plan
- Finishes studies in Senate Reading Room and House of Representatives Suite
- Plaster conservation surveys in Senate Reading Room and House Chamber

JULY 24, 2012

Selected Relevant Projects



Starr-Axinn Center, Middlebury College, Middlebury, VT

- Restoration of 1927 and 1957 Buildings as part of adaptive reuse project
- Existing conditions survey
- Construction documents
- Project monitoring
- Recipient of Boston Society of Architects 2009 Sustainable Design Award

Selected Relevant Projects



New Haven Superior Courthouse, New Haven, CT

- Historical Restoration Study
- Archival research
- Finishes analysis
- Documentation and development of comprehensive database of all interior and exterior building materials
- Preparation of National Register nomination

SPECIFIC RELEVANT EXPERIENCE

PERRY DEAN ROGERS | PARTNERS ARCHITECTS

JULY 24, 2012

PLYMOUTH TRIAL COURT



*DCAM Award for Design Excellence
2008*

RELEVANT EXPERIENCE

JULY 24, 2012

LAWRENCE SUPERIOR COURTHOUSE



RELEVANT EXPERIENCE

JULY 24, 2012

BAKER HOUSE, MIT



BEFORE



AFTER

BAKER HOUSE, MIT



RELEVANT EXPERIENCE

JULY 24, 2012

YALE - BRANFORD AND SAYBROOK COLLEGES

Perry Dean • BVH • BCA



SALEM PFC

Relevance to Salem Probate & Family Court Project:

- Restoration; Working within historical context
- Multiple constituencies
- Multi-disciplinary consultant group
- Formulation of goals and workplan preparation
- Existing conditions assessment
- Comprehensive building systems analysis & upgrade
- Universal Design
- Energy savings analysis / Sustainable design
- Comprehensive Feasibility Study

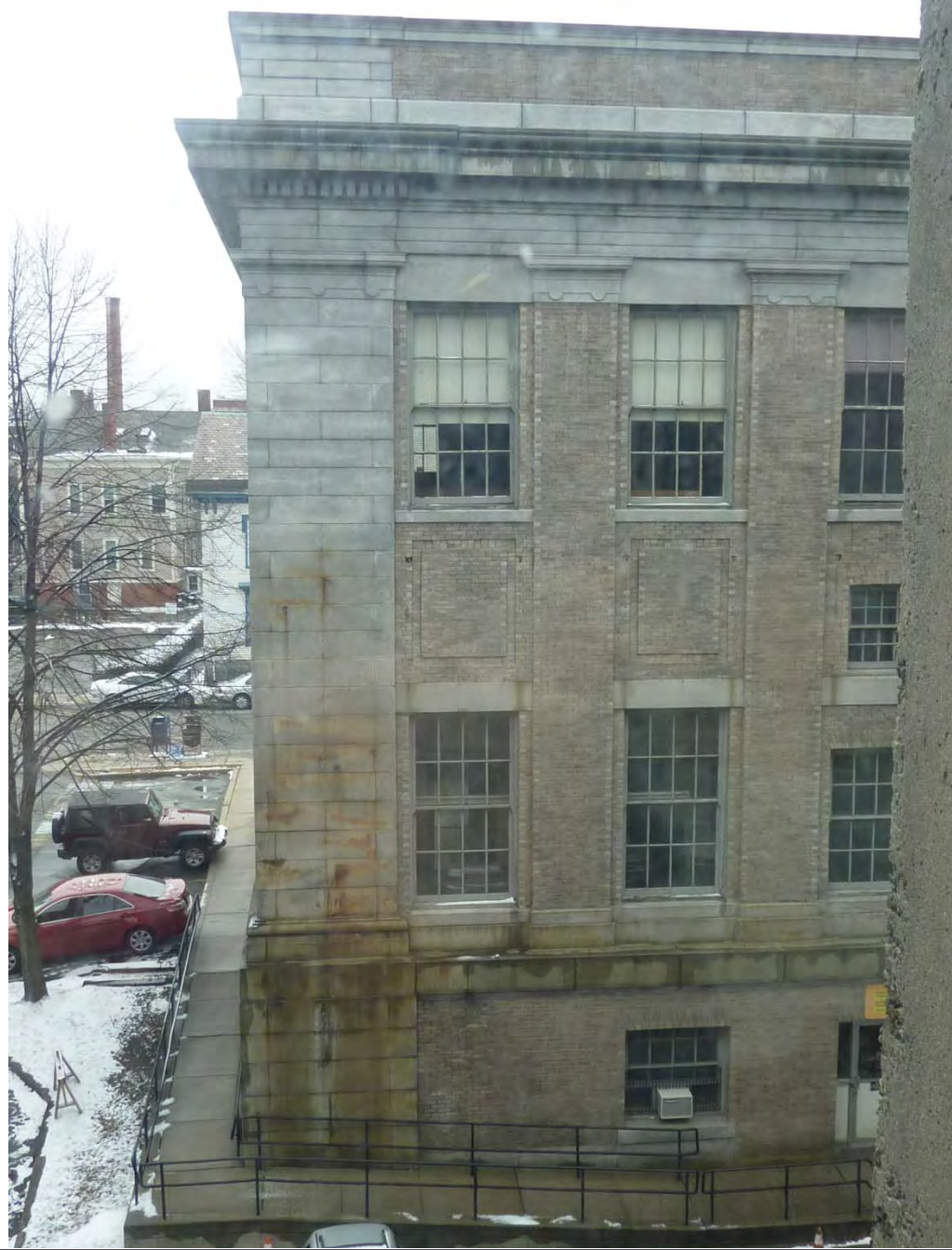
COMPARABLE PROJECT

JULY 24, 2012

YALE



SALEM PFC



COMPARABLE PROJECT

JULY 24, 2012

YALE



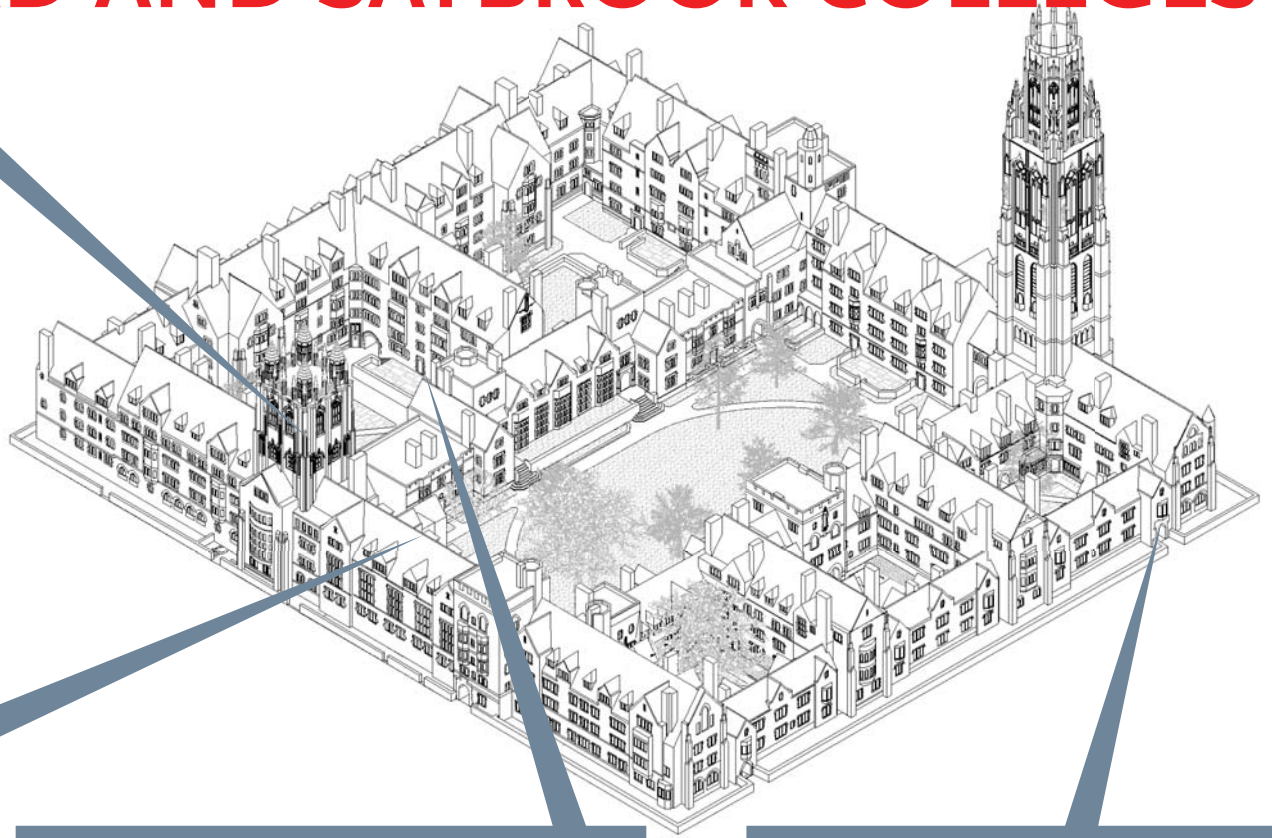
SALEM PFC



COMPARABLE PROJECT

JULY 24, 2012

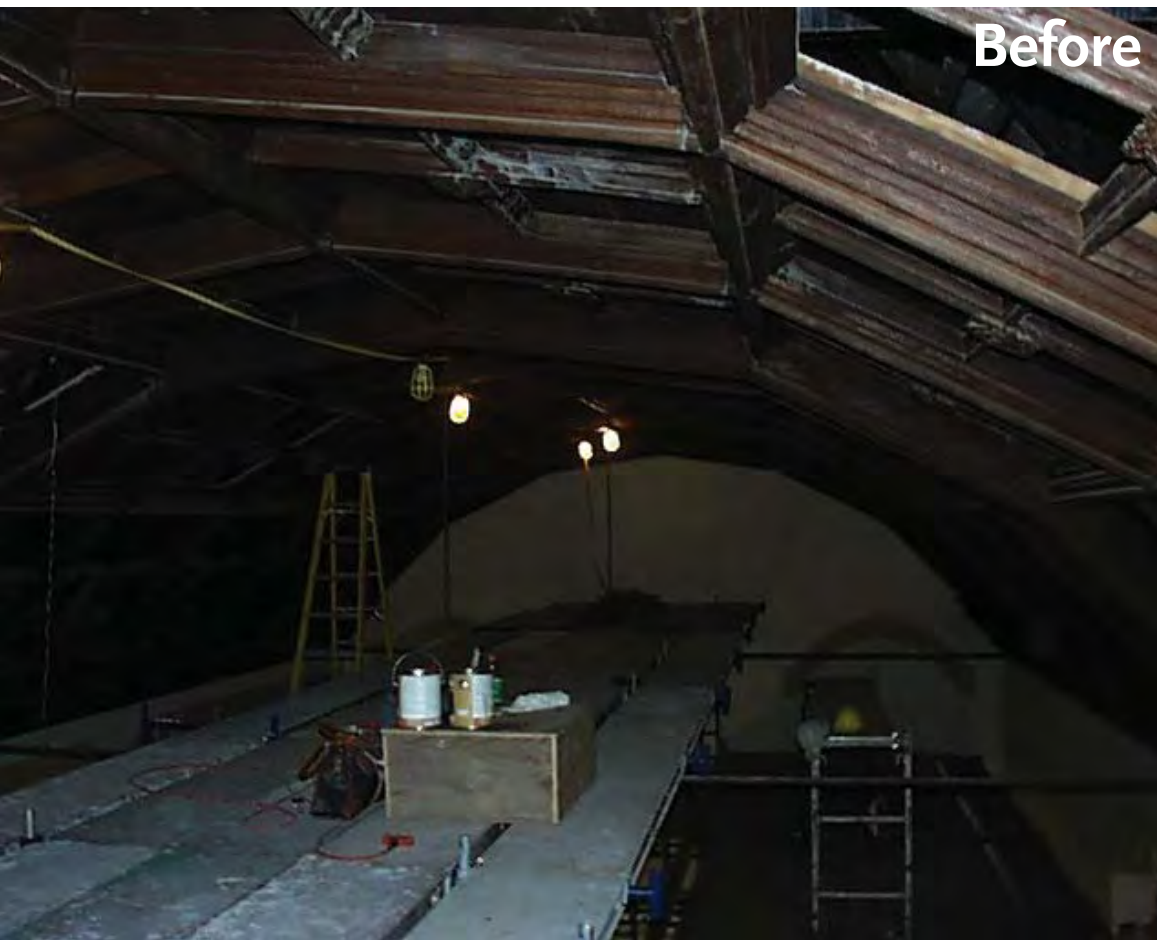
YALE - BRANFORD AND SAYBROOK COLLEGES



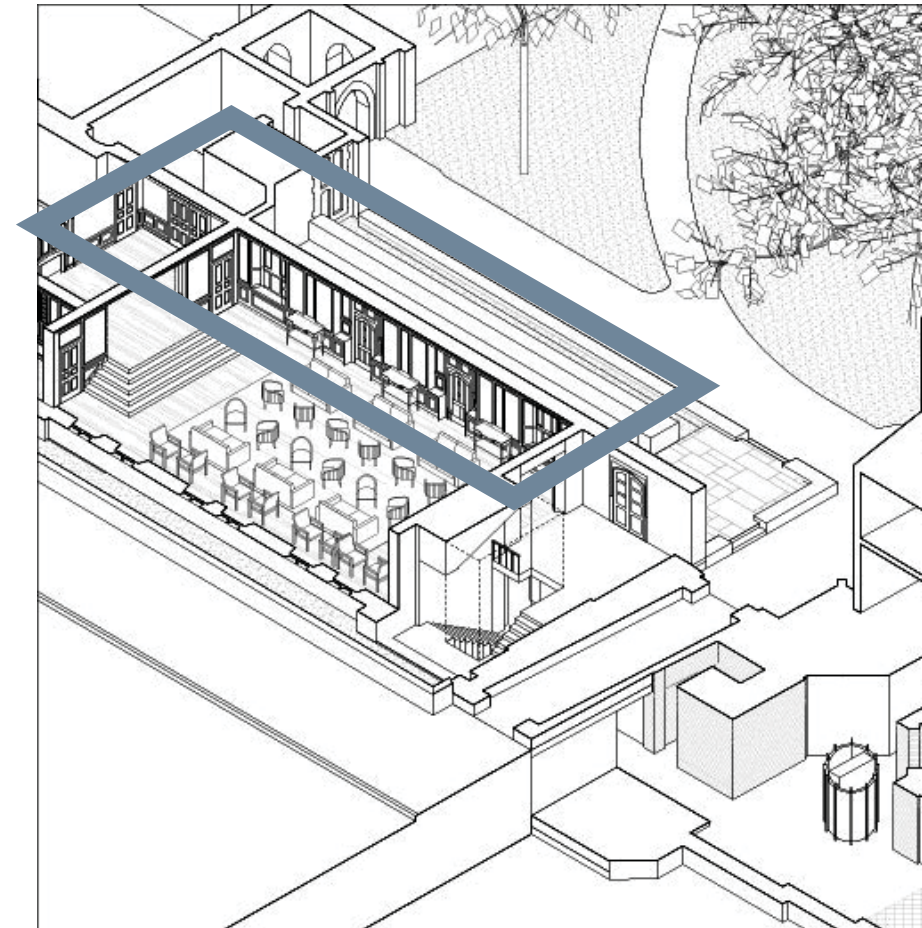
COMPARABLE PROJECT

JULY 24, 2012

YALE - BRANFORD AND SAYBROOK COLLEGES



- Disassembling the panels



BRANFORD DINING HALL

YALE - BRANFORD AND SAYBROOK COLLEGES



Mid-Point



After

- Reassembling the room

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4. SUSTAINABLE DESIGN

5. QUESTIONS

DCAM GOALS FOR COURTHOUSE DESIGN

- Support the mission, organization and operations of the User Agency.
- Design buildings that respect and reflect local urban design considerations.
- Ensure that the Commonwealth's buildings balance short- and long-term benefits and costs to ensure long-term useful life and capacity for future changes in operation and use.
- Employ Universal Design principles.
- Achieve a degree of sustainability that minimizes negative environmental impact and maximizes features that conserve natural resources.
- Make public buildings that convey a public spirit, civic-mindedness, innovation, accessibility and social permanence.



AOTC GOALS FOR COURTHOUSE DESIGN

- Provide efficient and cost-effective judicial services to the public.
- Design a facility that supports the courts functions efficiently.
- Reinforce the importance of the court in society as a place where citizens participate in the justice system.
- Ensure the safety and security of all court staff and users.
- Enhance the delivery of justice by using technology to provide court users with an array of options to assist in court-related business and practices efficient collection, analysis and communication of information.
- To provide the best work environment for the health and well-being of the court staff as well as the public.

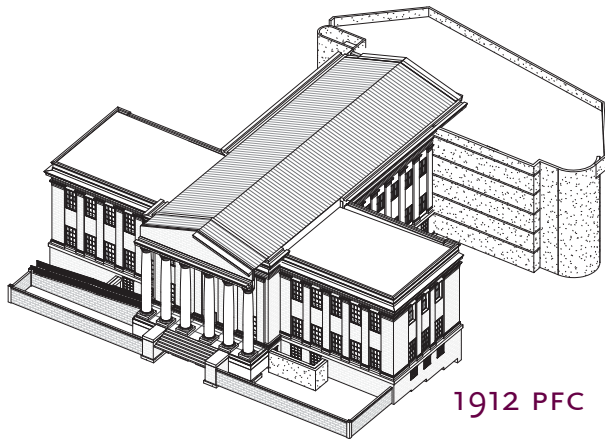


PROJECT LOCATION



SALEM PROBATE & FAMILY COURT
36 Federal Street
Salem, MA

1979 ADDITION



1912 PFC

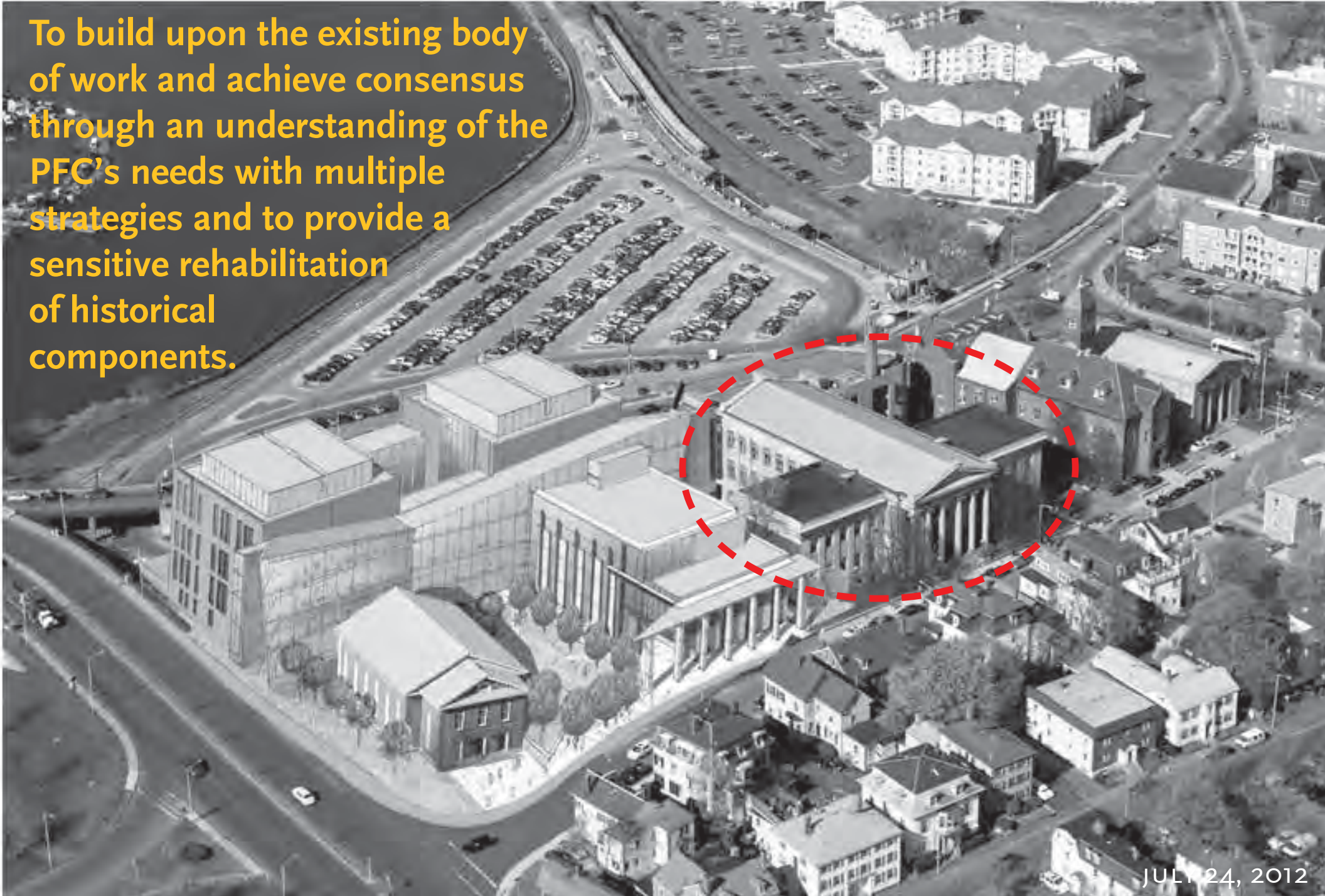


1. Ruane Judicial Center (Completed 2011)
2. Probate & Family Court - Building Renovation Study
3. Superior Court - Heating Plant Study
4. County Commissioner's Building - Heating Plant Study
5. District Court - Temporary Space

JULY 24, 2012

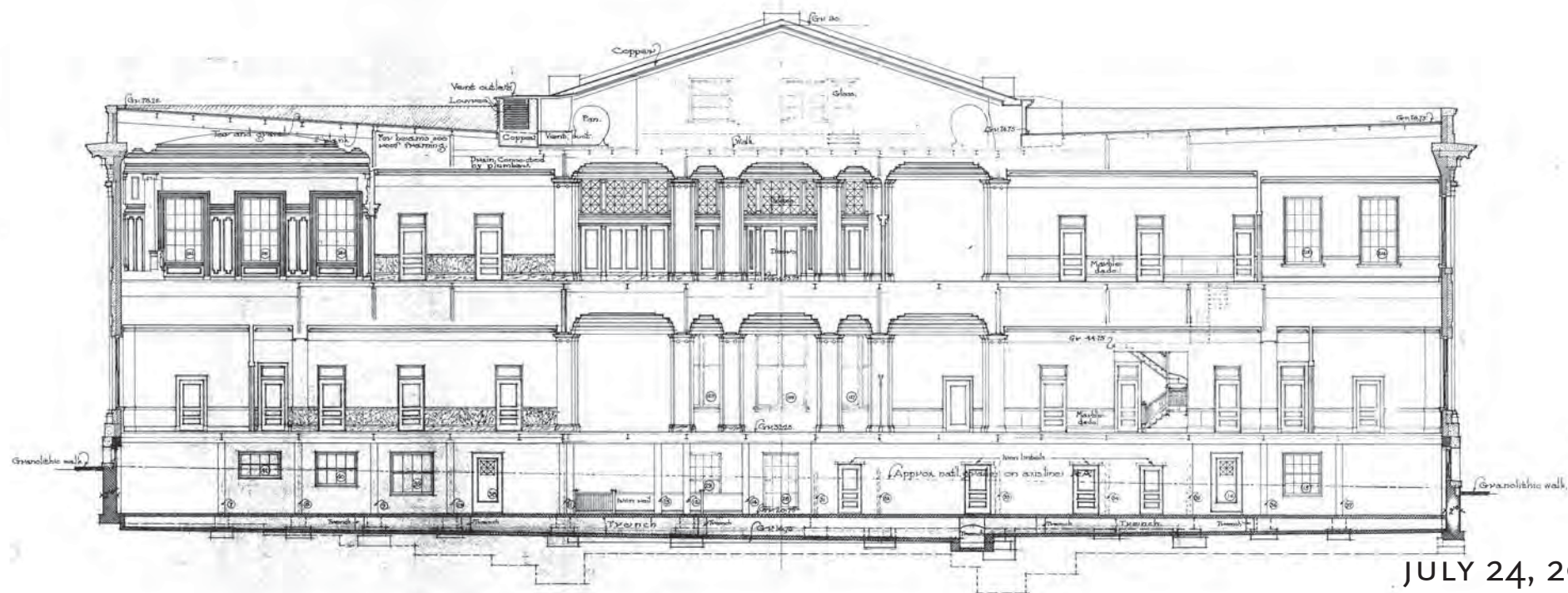
UNDERSTANDING THE VISION

To build upon the existing body of work and achieve consensus through an understanding of the PFC's needs with multiple strategies and to provide a sensitive rehabilitation of historical components.





SECTION ON AXIS B-B.
SCALE ONE EIGHTH INCH EQUALS ONE FOOT.



Approved by Special
Board, March 21, 1907.

*R. Harrison
J. Callahan
Howard J. C.*

SEE DRAWING NO. 18
FOR VESTIBULE
CORNICE, ETC.

CONTINUE
GRILL

RED LINES SHOW
SECTION THROUGH
REVOLVING DOOR

CONTINUE
GRILL

SIDE ELEVATION AT STAIRS

ELEVATION LOOKING WEST.

DETAILS OF FIRST FLOOR
STAIRCASE HALL.
Scale one inch equals one foot.

PLAN.

3 FOLD ELEVATOR DOOR

REGISTRY OF DEEDS AND PROBATE COURT
SALEM, MASS.

C. H. BLACKALL, ARCHITECT
BOSTON

NO. 22
DATE

FRAMING THE ISSUE

GOALS

- Understand current programmatic and functional needs of the Trial Court, and Probate & Family Court Department in Essex County, Salem.
- A certified study and conceptual design for the renovation of the existing PFC building
- Review and provide economical solution for Temporary Space for PFC operations during the renovation
- Analyze and recommend a separate Heating Plant for adjacent Superior Court and County Commissioner's Buildings

CHALLENGES

- To accommodate the needs of a contemporary courthouse within an existing building while retaining its historic character and distinctiveness
- To carefully evaluate program needs for the PFC in the context of Essex County, while also considering the adjacent Ruane Judicial Center as an asset to be leveraged



CHALLENGES / CONSTRAINTS

PROGRAMMING ISSUES:

- Right-sizing; affirming the PFC's needs in the context of Essex County and the Ruane Judicial Center
- Accommodating large, contemporary courtrooms in existing historic envelope
- Secure circulation: maintaining separation of public, staff & detainees
 - New stair locations



THE PROBATE & FAMILY COURT PROGRAM

USER POPULATION:

- General Public

Jurors
Litigants, Pro Se Litigants
Detainees
Researchers
Victims; Witnesses
Advocates
Press / Media
Clinicians; Social Services
Families - All age groups

- Courts Personnel & Staff

Judges
Clerk Magistrate
Probation Officers
Register of Probate
Court Officers
Building Management
Court Interpreters
Court Reporters
IT & other support

- Professionals

Defense Attorneys
Prosecutors
Mental health workers
Advocates
Mediators

- District Attorneys & ADA's

- Public Safety Officers

- Service Providers

Couriers
Maintenance & Concession Vendors
Translators
Child care providers

PROGRAMS SUPPORTED BY THE PFC:

- Department of Revenue (DOR)
- Family Law / Pro Se Center
- Alternative Dispute Resolution

MEETING THE PROGRAM

KEY ISSUES IN CONTEMPORARY COURTHOUSES

- Diverse user groups
- Separate zones of circulation
- Multiple entry points
- Security
- Alternative Dispute Resolution
- Un-represented Litigants (Pro Se)
- Information Technology
- Social Services

SALEM PFC ISSUES:

- Department of Revenue - “DOR Day”
 - Must accommodate large surge of patrons every other week: shared, dual-use spaces
 - Use Hearing Room, Pre-Trial Conference Rooms, Waiting Areas
- Family Law / Pro Se Center
 - Reliance on Registry of Probate staff to oversee Public Research Area; share conference rooms
 - Share/combine Public Waiting/Transaction areas with Probate
- Detainees
 - Low anticipated detainee use;
 - Share secure circulation (corridor & elevator) with judges & staff

PROGRAM DEVELOPMENT

DEPARTMENT	DEPARTMENT GROSS SQ FT
Court sets (4 Courtrooms)	11,875 <small>(2 large courtrooms @ 2,000 sf seating 50-60 spectators 2 small courtrooms @ 1,400 sf seating 25-30 spectators)</small>
Court Support & Holding	696 <small>(includes Court Officers; Detainee Holding)</small>
Judicial Offices & Support	3,931
Register of Probate	11,544 <small>(includes approx 4,000s sf high-density Records Storage)</small>
Probate Probation	7,618
Entry / Lobby Area	1,279
Supplemental Operations	1,635 <small>(includes Pro Se/Family Law Center, DOR)</small>
Secure Waiting	455
Building Support	6,003
TOTAL	45,036 Dept GSF

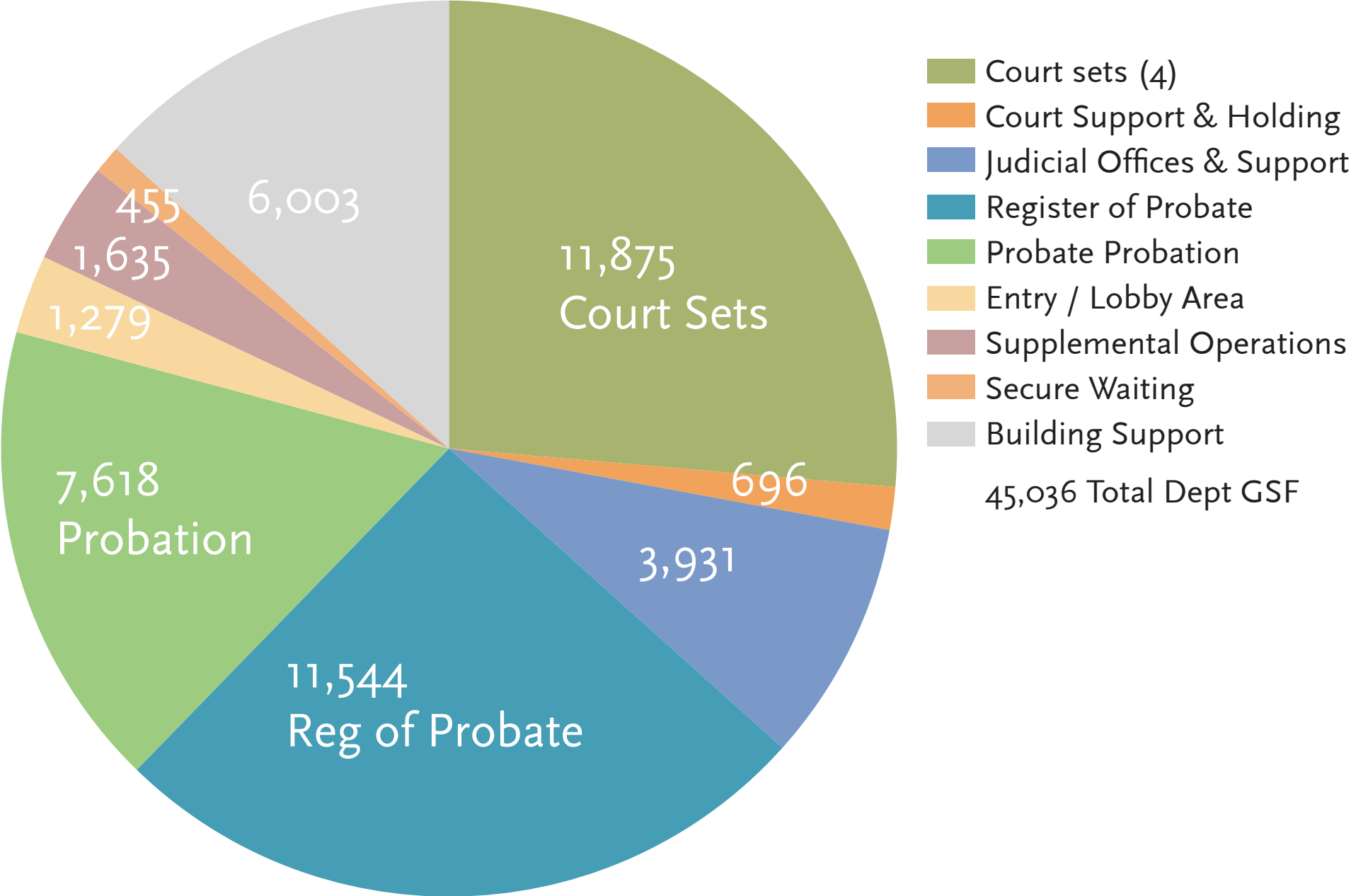
1912 Probate & Family Court: 50,000 GSF

1979 Addition 27,000 GSF

= **77,000 GSF TOTAL EXISTING**

= 58% Target Efficiency

PROGRAM DEVELOPMENT | Depts by Size (GSF)



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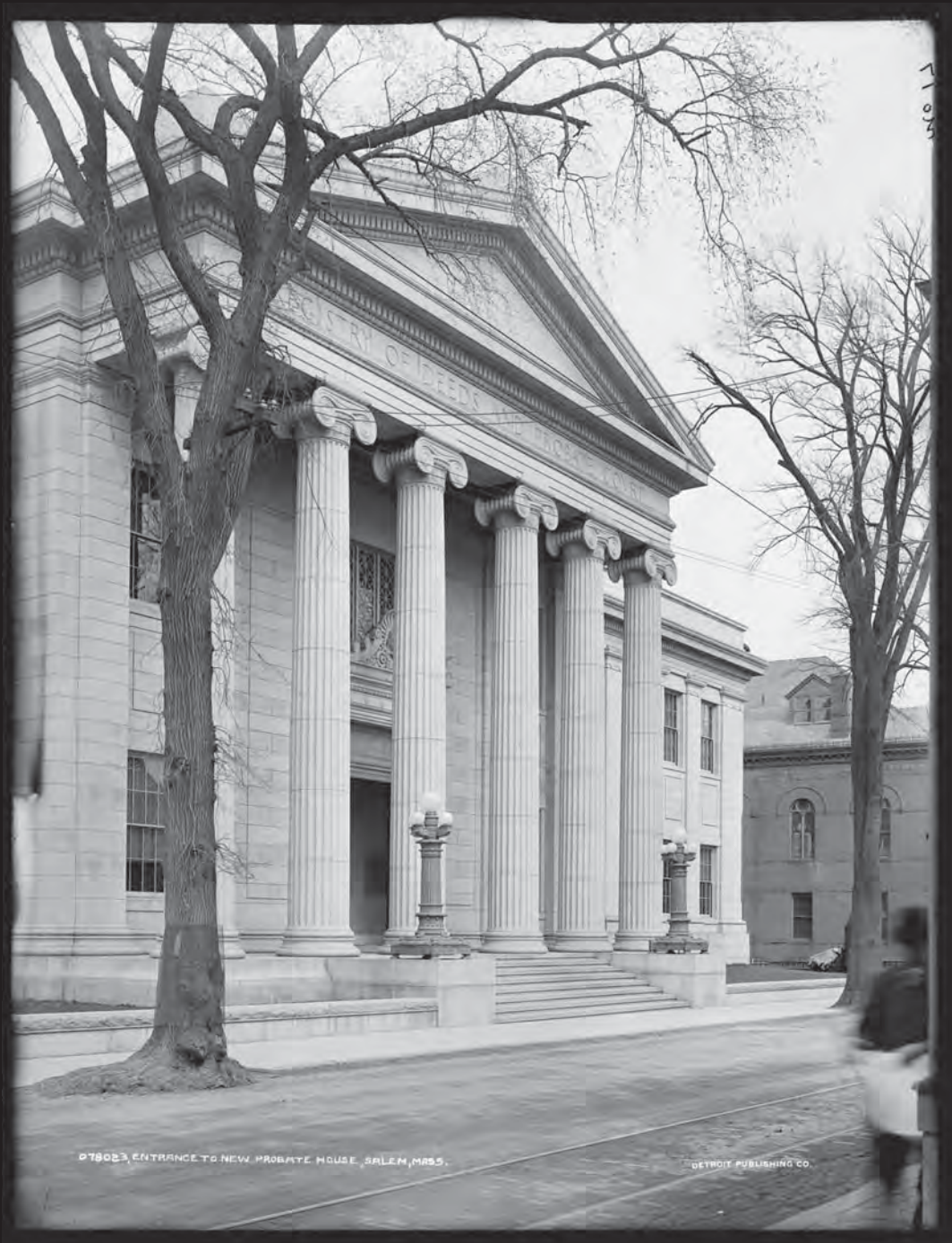
3. HISTORIC CONSIDERATIONS

Character-defining features

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BUILDING EXTERIOR | Historic Elements



THE REGISTRY OF DEEDS AND PROBATE COURT HOUSE
Erected in Salem in 1908-1909.

CHARACTER-DEFINING FEATURES

BCA

Exterior

- Part of complex of courts
- Strong symmetry
- Durable materials:
 - Standing seam copper
 - Granite
 - Brick



JULY 24, 2012

Exterior

- Consistent window bay rhythm
- Crisp detailing, narrow mortar joints



South Elevation

- Non-traditional column capitals
- 8/8 Double-hung wood windows
- Spare, articulated panels between floors



North Elevation – East and West wings

- Transition of materials and detailing: stone to brick
- Non-traditional column capitals
- 8/8 Double-hung wood windows
- Spare, articulated panels between floors



North Wing

- Continuation of window bay rhythm
- Taller windows
- Mottled texture on bricks



Windows

- Typically operable 8/8 wood double-hung
- Pairs of operable 1/1 wood double-hung with decorative transoms at north wing
- Stile extensions at top sashes
- Brick flat arches or stone lintels
- Stone sills



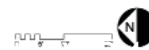
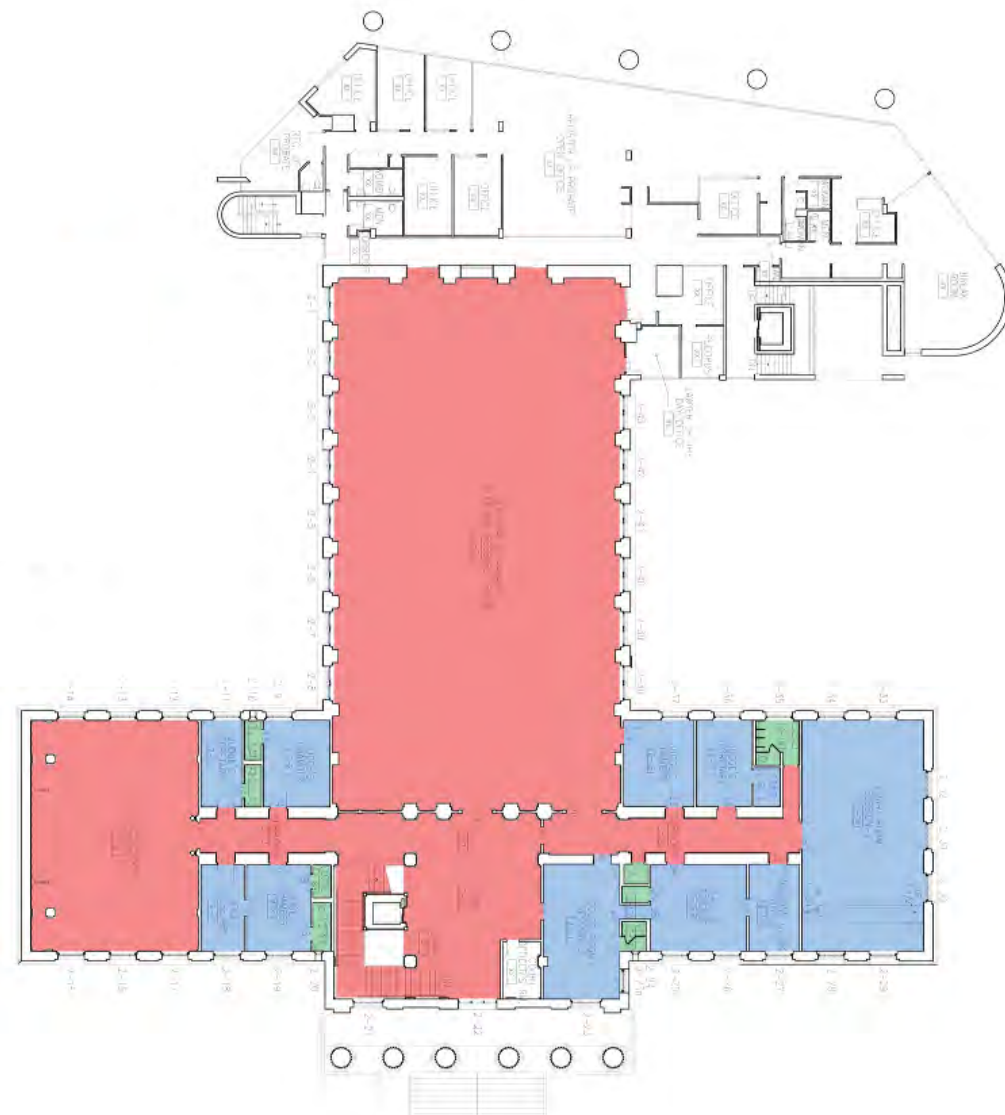
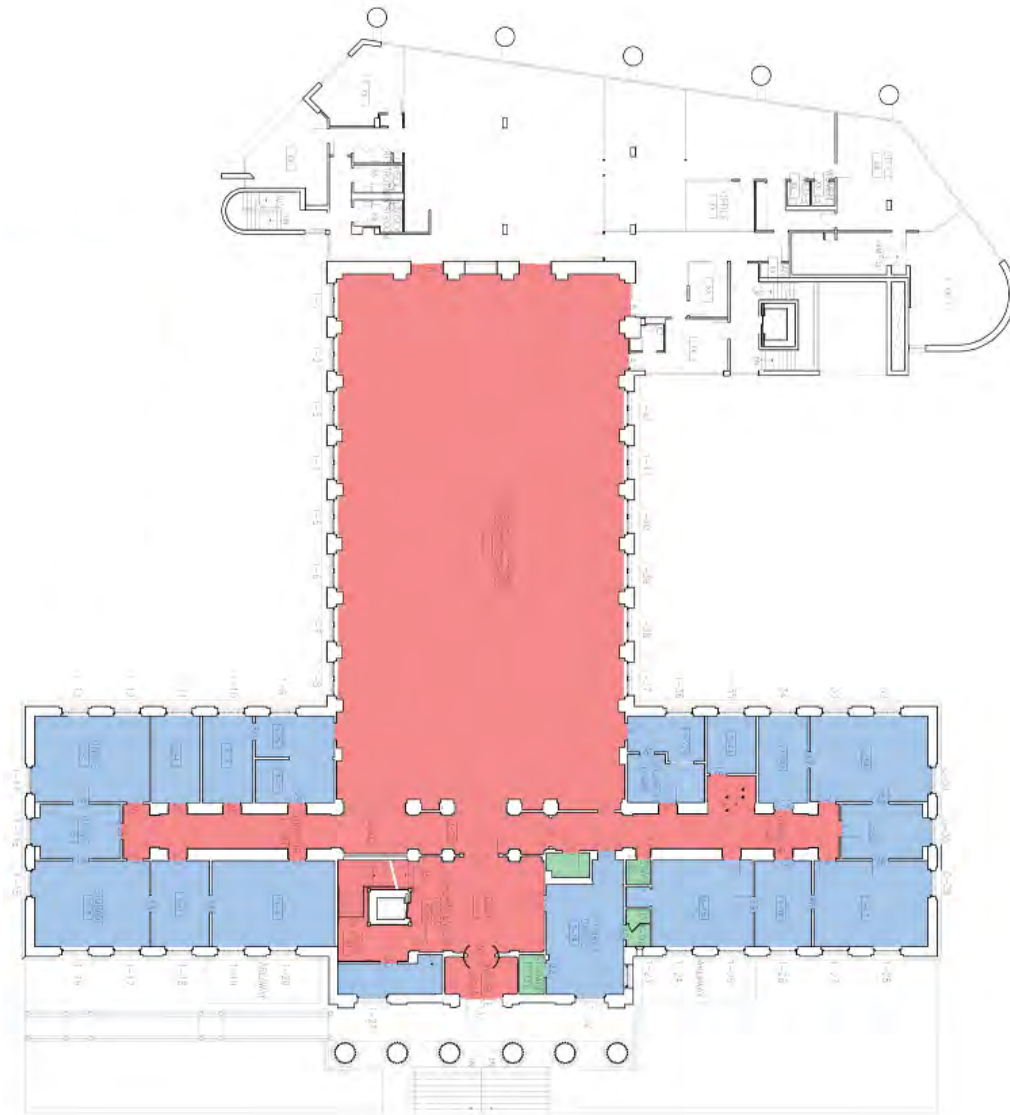
Entry Portico

- 6 Ionic columns
- Tall, ornamental doorway with inscribed plaque
- Decorative, operable casement windows
- Paneled wood ceiling
- Pair of decorative cast metal light standards



BUILDING INTERIOR | Historic Zones

- **ZONE 1** Areas of high architectural or historic significance: RESTORE
- **ZONE 2** Areas with fewer significant features
- **ZONE 3** Areas with minimally-significant architectural or historic features



Entry Vestibule

- Wood doorway for revolving doors (now pair of hinged doors)
- Wood transom and trim (exterior transom non-original)
- Plaque
- Decorative plaster cornice
- Marble floor tiles and baseboard



Main Lobby

- Elevator with decorative metalwork exterior
- Monumental stair with marble steps and wainscot
- Decorative metal cornices and stair balustrades



Main Lobby

- Plaster ceilings and deep cornices
- Decorative millwork with transom windows
- Marble pilasters and floor tiles
- Large, ceiling-mounted light fixture



2nd Floor Lobby

- Monumental public space
- Continuation of Main Lobby features
- Marble “balustrade” guard rails



2nd Floor Lobby

- Decorative, operable wood casement windows
- Strong symmetry
- Durable materials



Register of Probate

- Tall ceilings
- Plaster pilasters and deep cornices at beams
- Tall windows with transoms
- Decorative millwork panels and transoms



Register of Probate

- Large, unified volumes of space
- Wood laylight at second floor (missing skylight above)



Session 1 Courtroom

- Large, shallow saucer dome coffer
- Tall, wood paneled wainscot
- Decorative wood entryway with double doors
- Deep cornices and beams
- Pilasters and free-standing columns
- Judge's bench



Corridors

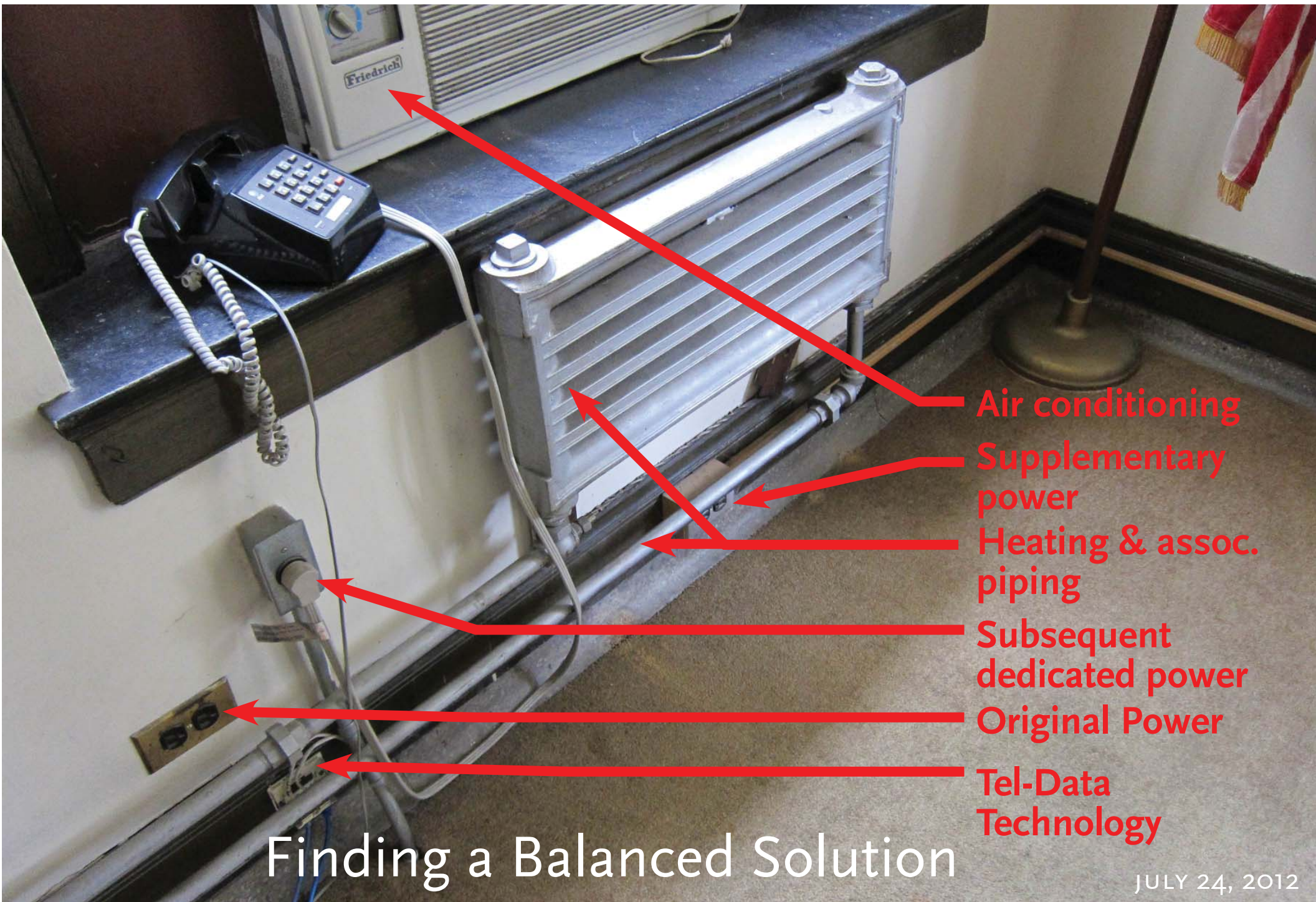
- Tall, spare spaces
- Bookmatched marble wainscot
- Marble floor tiles
- Wood millwork at central bays



Other Features



EXISTING CONDITIONS


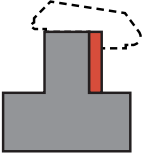
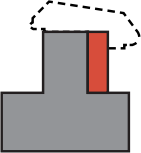
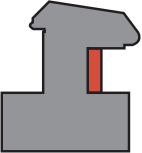
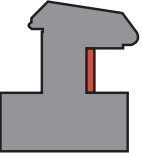
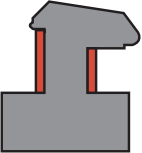





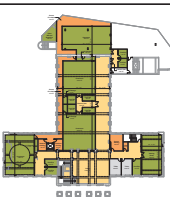


Air conditioning
Supplementary
power
Heating & assoc.
piping
Subsequent
dedicated power
Original Power
Tel-Data
Technology

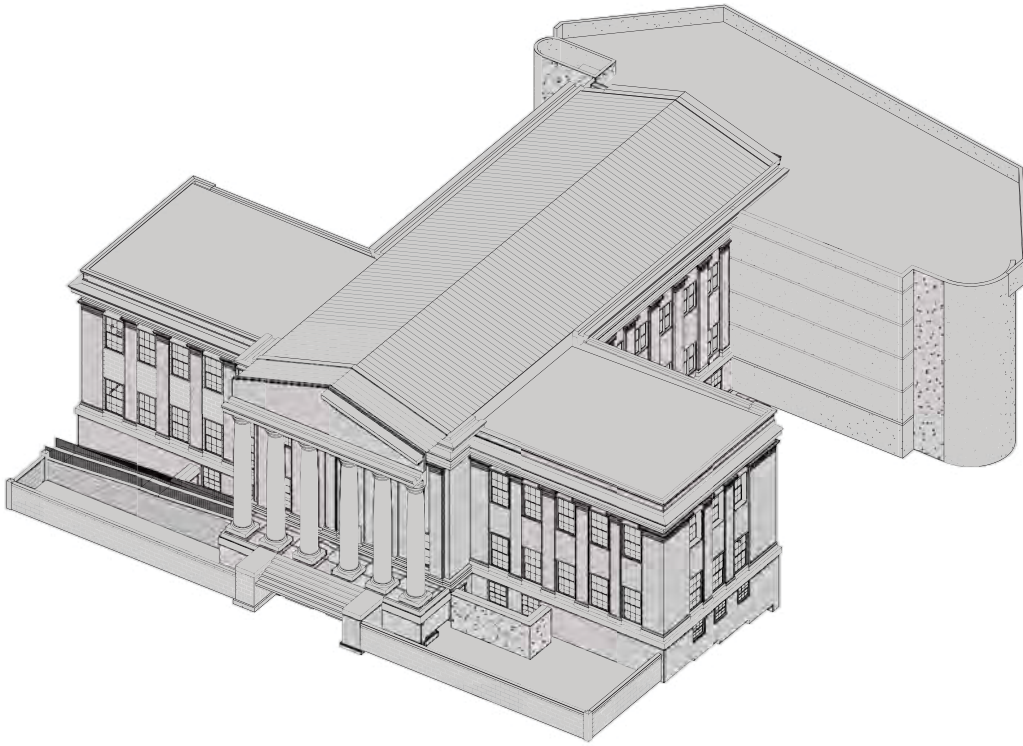
Finding a Balanced Solution

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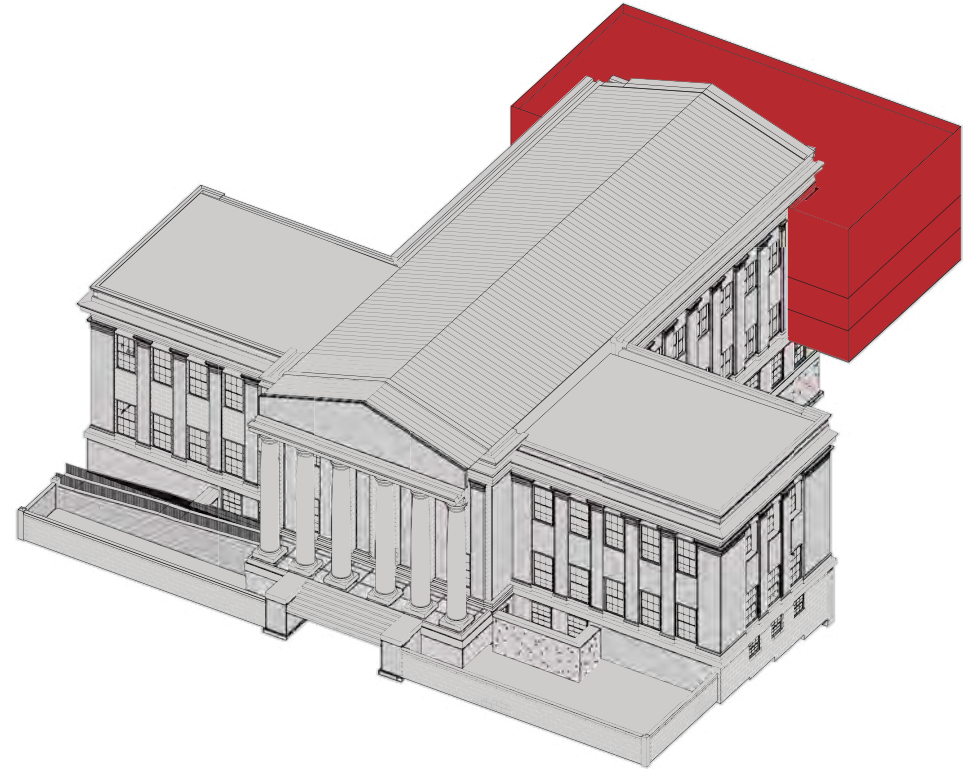
PFC - CONCEPTS EXPLORED

	NO ENVELOPE CHANGE			DEMO 1979 WING		ENVELOPE ADDITION		
	 RENOVATION ONLY			 10,620 SF ADDITION	 18,240 SF ADDITION	 CONF. RM. ADDITION	 SECURE CIRCULATION ADDITION	 SECURE CIRCULATION ADDITION
LEVEL 0				NO LONGER UNDER CONSIDERATION. NOT ADVANTAGEOUS PROGRAMMATICALLY				
LEVEL 1								
LEVEL 1M								
LEVEL 2								
LEVEL 2M								

EVALUATION OF 1979 ADDITION



SCHEME A:
NO ENVELOPE CHANGE -
RENOVATION ONLY

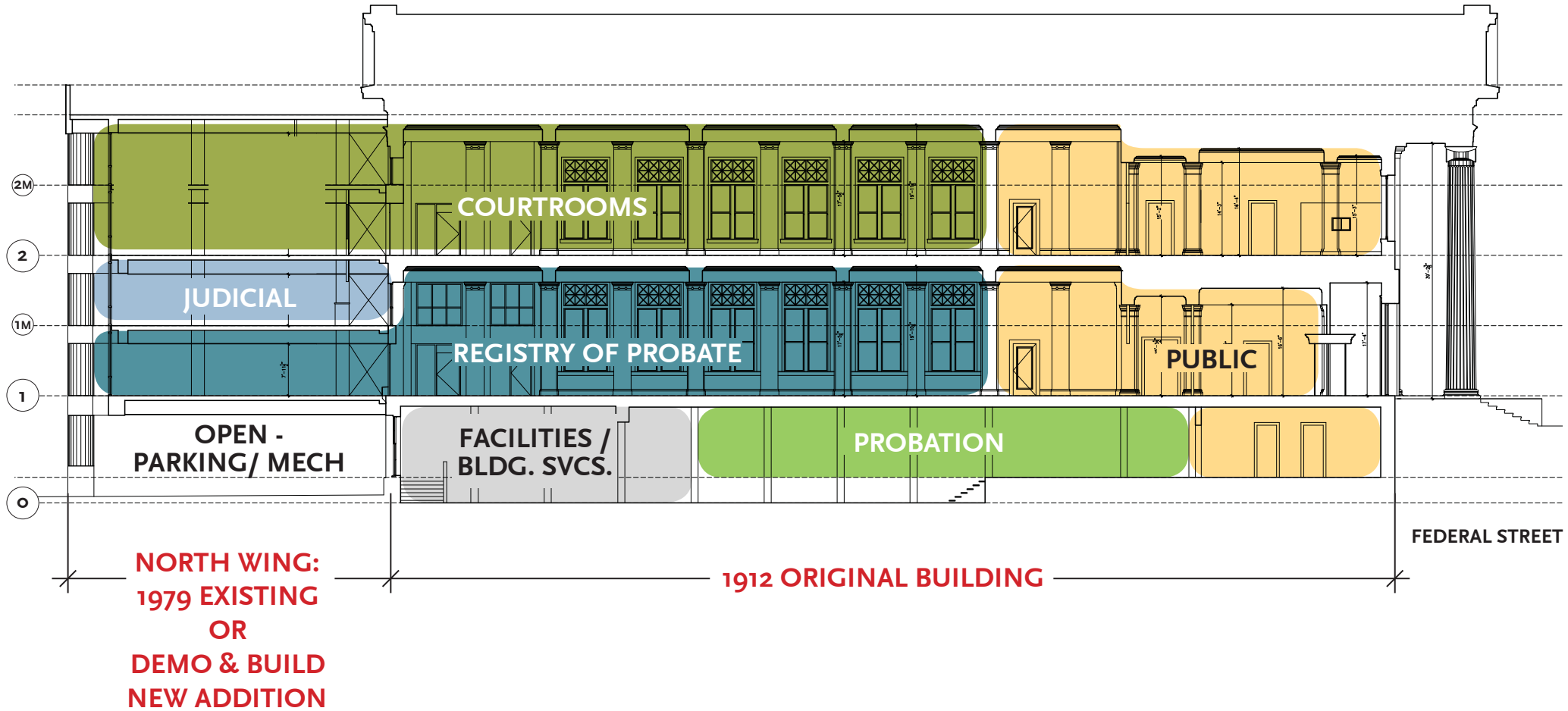


SCHEME B:
DEMO 1979 WING -
NEW ADDITION @ NORTH

**CURRENTLY UNDER
INVESTIGATION**

JULY 24, 2012

SECTION | Proposed Program Distribution



CURRENTLY UNDER
INVESTIGATION

JULY 24, 2012

LEVEL 0



JULY 24, 2012

SCHEME A | No Envelope Change

LEVEL 1



CURRENTLY UNDER INVESTIGATION

SCHEME A | No Envelope Change

LEVEL 1M



① LEVEL-02 MEZZ NEC 2A
1" = 20'-0"

CURRENTLY UNDER
INVESTIGATION

JULY 24, 2012

SCHEME A | No Envelope Change

LEVEL 2



① LEVEL-02 NEC 2B
1" = 20'-0"

CURRENTLY UNDER
INVESTIGATION

JULY 24, 2012

SCHEME B | North Addition

LEVEL 2



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SUSTAINABLE DESIGN PRIORITIES

EO484; MASS LEED PLUS; LEED SILVER MIN.



- Envelope Improvements
- Optimizing Energy Performance
 - Mechanical system
 - Electrical: Lighting
- Energy modeling to test and fine-tune strategies
- Consideration of impact on historic building
- Health and well-being of occupants and the public

HISTORIC BUILDINGS | Improving Energy Efficiency

- Balance goals of energy efficiency & potential energy savings with protection of historic property's materials & features
- Understand and leverage the existing building's inherent energy-efficient features
- Prioritize energy upgrades for improvements that provide the most payback and least compromise to historic character



UPGRADING BUILDING COMPONENTS:

MINIMAL ALTERATION

- Reduce air leakage
- **Install storm windows***
- **Add Attic insulation***
- Seal & insulate ducts & pipes
- Weather strip doors / add storm doors
- **Add shading devices (interior*/exterior)**

MORE ALTERATION

- Add/Reconfigure interior vestibules
- **Replace windows***
- **Add insulation to exterior walls***
- Install cool roofs and green roofs
- **Replace doors***

***presently pursuing**

JULY 24, 2012

A photograph of a large industrial machine, likely a steam engine or pump, featuring a massive dark metal flywheel with many spokes. A thick, curved metal band or belt is draped over the flywheel and extends towards a smaller red motor on the right. The machine is housed within a large, riveted metal structure. The floor is concrete, and the overall lighting is somewhat dim, highlighting the metallic surfaces.

QUESTIONS

JULY 24, 2012