

FAIRHAVEN HIGH SCHOOL



EXTERIOR MAJOR IMPROVEMENTS 5 YEAR PLAN

NOVEMBER 2016

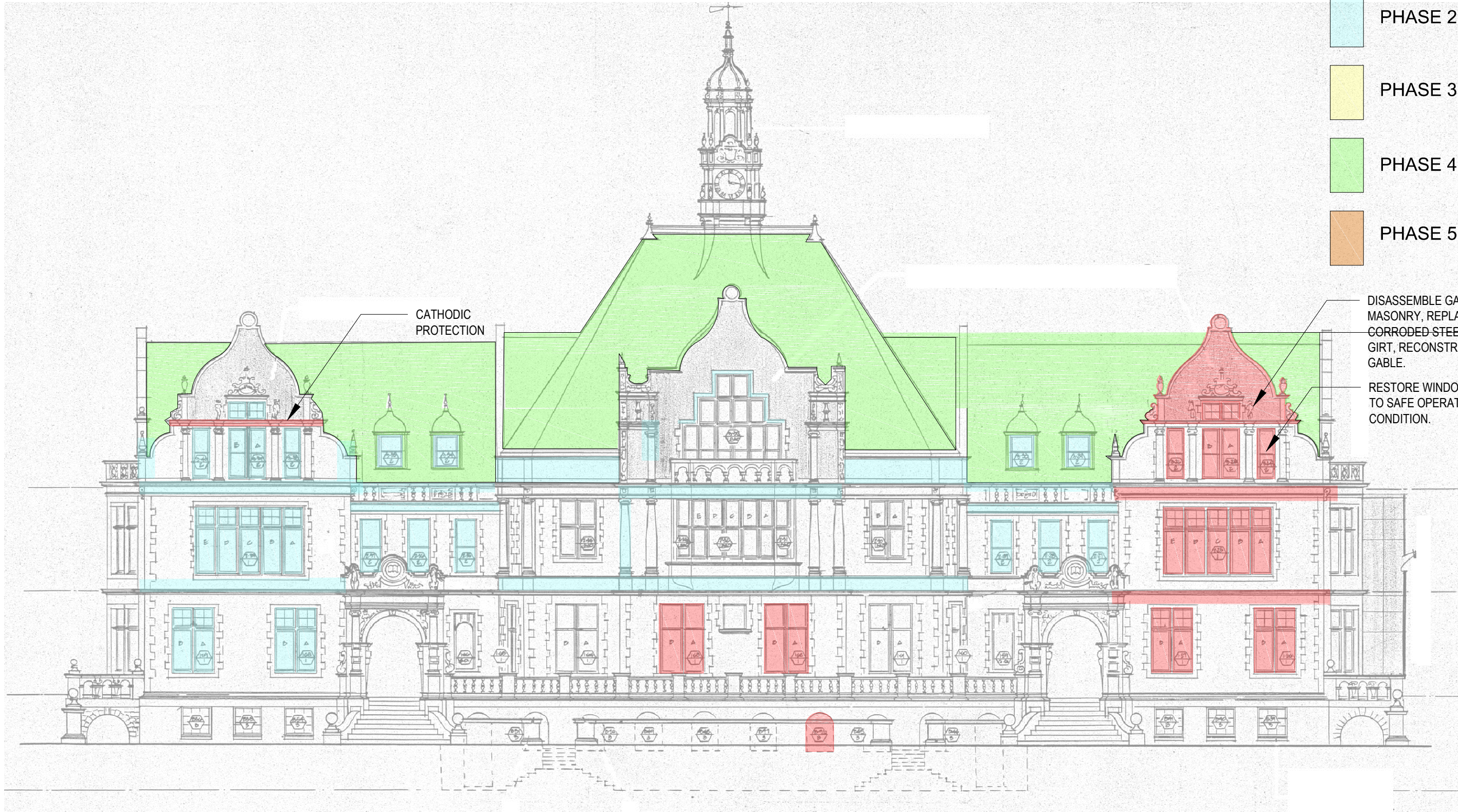
SPENCER & VOGT GROUP
architecture preservation

**Fairhaven High School - 5 Year Major Improvements
Cost Estimate Summary**

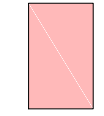
Work Category	PHASE I SOUTHEAST GABLE WING ELEVATIONS	PHASE II SOUTHWEST ELEVATIONS	PHASE III NORTH, EAST, LIBRARY ELEVATIONS	PHASE IV MAIN ROOF	PHASE V LIBRARY ROOF
General Conditions	\$ 55,000	\$ 290,000	\$ 198,000	\$ 346,000	\$ 118,000
Window Restoration (for safe operating condition)	\$ 114,000	\$ 493,000	\$ 503,000		
Masonry Restoration:					
- Repointing & Stone Repairs	\$ 57,000	\$ 490,000	\$ 138,000		
- Reconstruction	\$ 551,000				
- Cathodic Protection	\$ 90,000				
Roof Replacement:					
- Flat Roofs				\$ 220,000	
- Slate Roofs	\$ 174,000			\$ 565,000	\$ 496,000
Contractor Overhead and Profit, 15%	\$ 156,150	\$ 190,950	\$ 125,850	\$ 169,650	\$ 92,100
CONSTRUCTION COST	\$ 1,197,150	\$ 1,463,950	\$ 964,850	\$ 1,300,650	\$ 706,100
Adjust for inflation factor of 3%/year					
Construction Contingency, 15%	\$ 179,573	\$ 219,593	\$ 144,728	\$ 195,098	\$ 105,915
Soft costs: architectural & engineering fees, regulatory reviews - HDC, Zoning, 15%	\$ 179,573	\$ 219,593	\$ 144,728	\$ 195,098	\$ 105,915
TOTAL	\$ 1,556,295	\$ 1,903,135	\$ 1,254,305	\$ 1,690,845	\$ 917,930
Grand Total of all Phases					
\$ 7,322,510					

Fairhaven High School - 2010 - 2016 Major Improvements

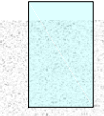
Work Category	CONSTRUCTION	OTHER	ARCHITECTURAL FEES Spencer & Vogt group
2010-11			
Conditions Assessment Menders, Torrey & Spencer (now Spencer & Vogt Group)			\$ 60,000
2011-12			
Roof: South & West Loggias, east gutter and related flashings			
Crocker Architectural	\$ 168,000		\$ 20,000
Direct purchase of limestone balusters		\$ 15,000	
2012-14			
Stained and leaded glass window restoration; wood window prototype to improve operability Serpentino Stained Glass with Westmill Preservation	\$ 300,000		\$ 20,000
2012			
Guastavino Vault restoration and repointing of the south porticos	\$ 95,000		\$ 20,000
Dupre Masonry			
Direct purchase of tile from Boston Valley		\$ 30,000	
2013-14			
Fire Escape replacements and related gutter and flashing work	\$ 314,000		\$ 51,500
Campbell Construction			\$ -
2016			
Windows -- Exterior painting Dandis Painting, Inc.	\$ 150,000		\$ 17,000
SUBTOTAL	\$ 1,027,000	\$ 45,000	\$ 188,500
COMBINED TOTAL	\$ 1,260,500		



KEY:



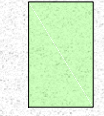
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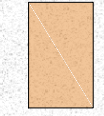
PHASE 2



PHASE 3



PHASE 4



PHASE 5

CATHODIC PROTECTION

DISASSEMBLE GABLE MASONRY, REPLACE CORRODED STEEL GIRT, RECONSTRUCT GABLE.

RESTORE WINDOWS TO SAFE OPERATING CONDITION.

1 SOUTH ELEVATION

Seal:

Consultant:

ISSUE / REVISIONS:

11.14.16

Date:
 Drawn by:
 Checked by:

1613.00

Project Number:



1 WEST ELEVATION - REAR WING

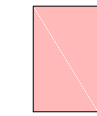


2 EAST ELEVATION - REAR WING

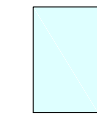


3 NORTH ELEVATION - REAR WING

KEY:



PHASE 1



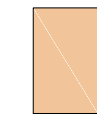
PHASE 2



PHASE 3



PHASE 4



PHASE 5

Architect
SPENCER & VOGT GROUP
architecture preservation
1 Thompson Square, Suite 504
Charlestown, MA 02129
617.227.2675
www.spencervogt.com

Seal:

Consultant:

ISSUE / REVISIONS:

11.14.16

Date:
Drawn by:
Checked by:
Project Number:

1613.00

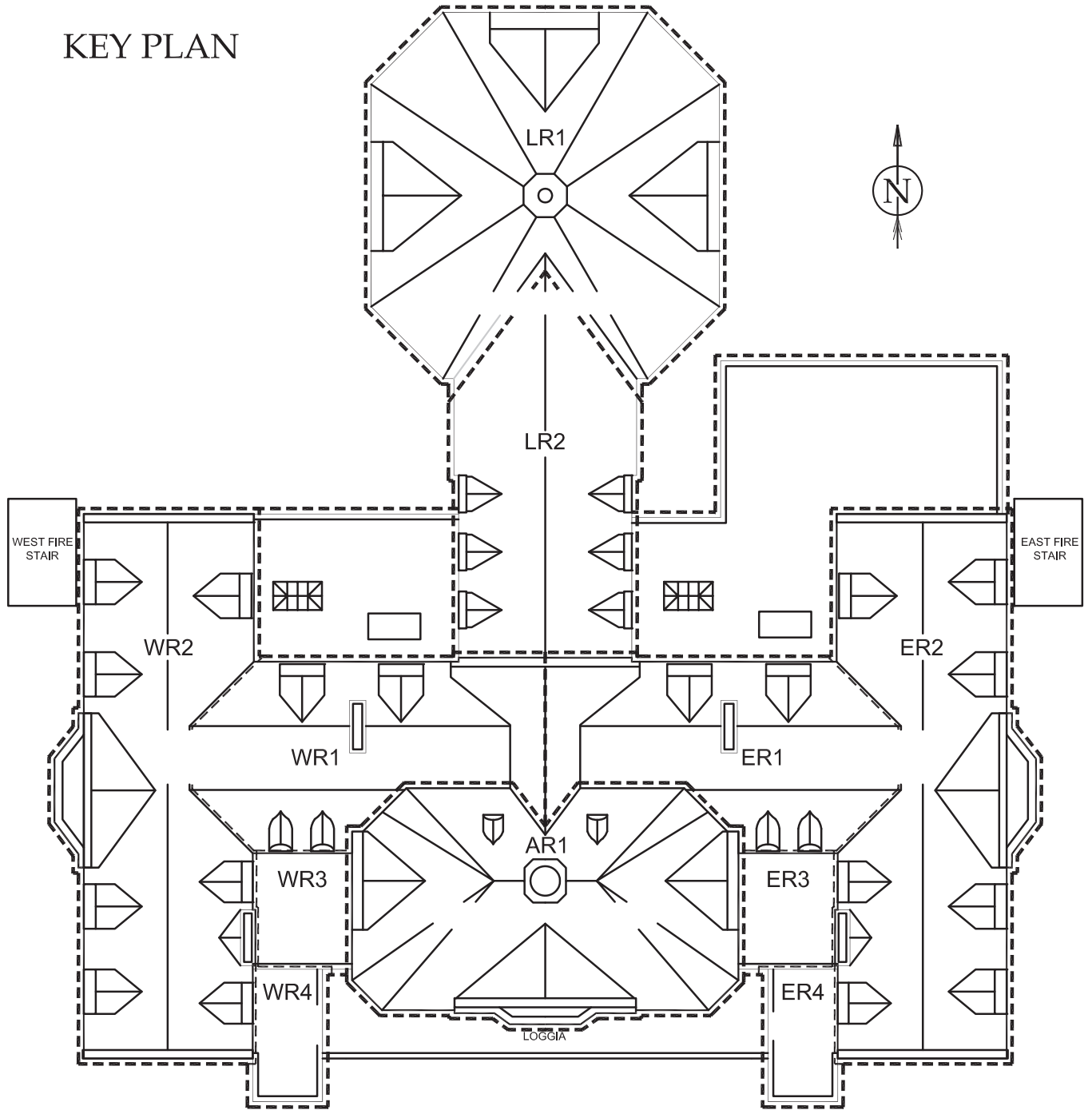
FAIRHAVEN HIGH SCHOOL
12 Huddleston Ave., Fair Haven, MA 02719

Phased Work Elevations

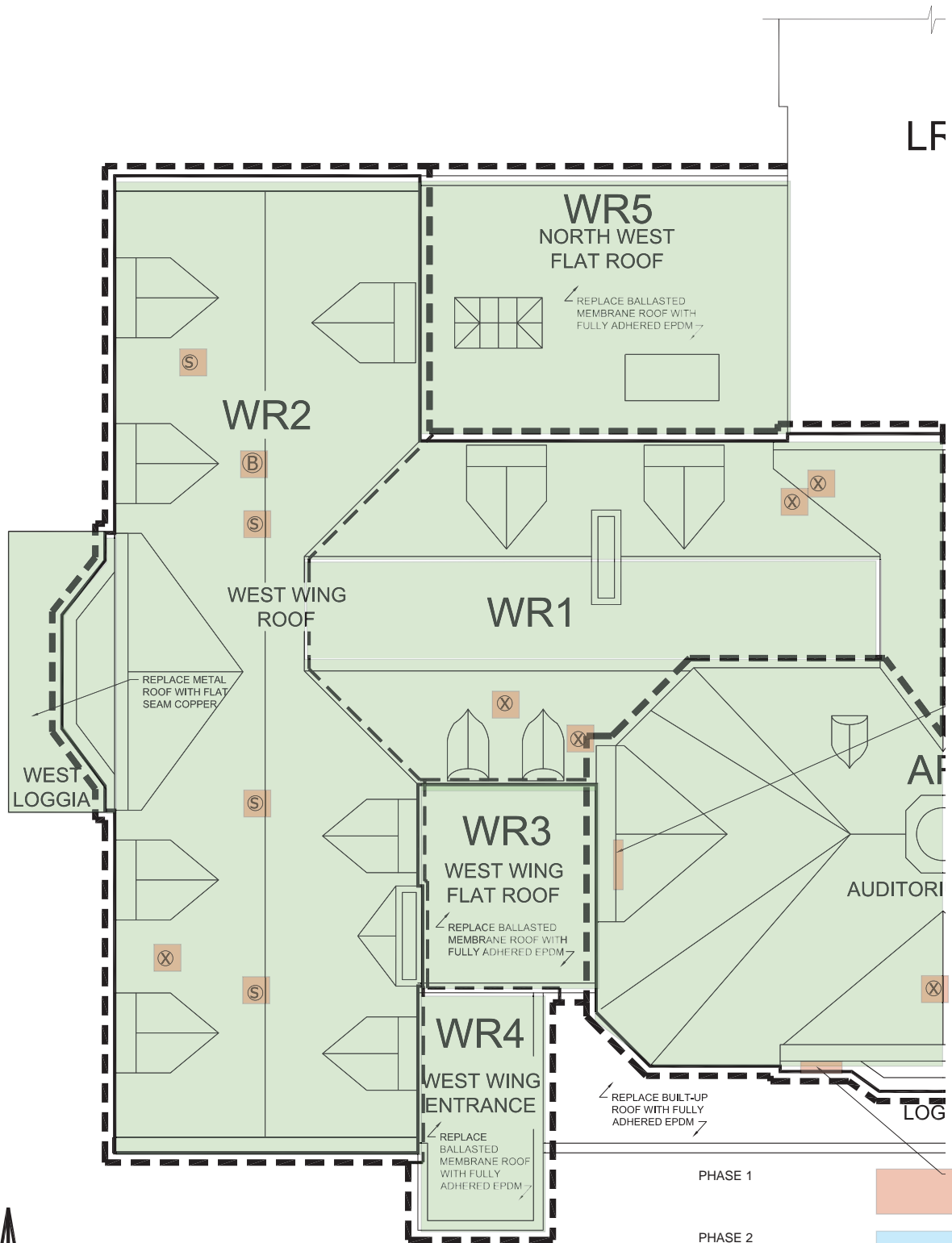
A204

Roof

KEY PLAN



SLATE REPAIR WORK	
(X)	MISSING SLATE TO BE REPLACED
(B)	BROKEN SLATE TO BE REPLACED
(S)	SLIPPED SLATE TO BE RESET

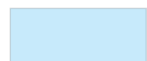


SLATE REPAIR WORK	
⊗	MISSING SLATE TO BE REPLACED
ⓑ	BROKEN SLATE TO BE REPLACED
Ⓢ	SLIPPED SLATE TO BE RESET

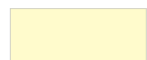
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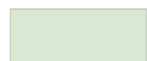
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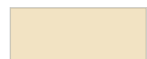
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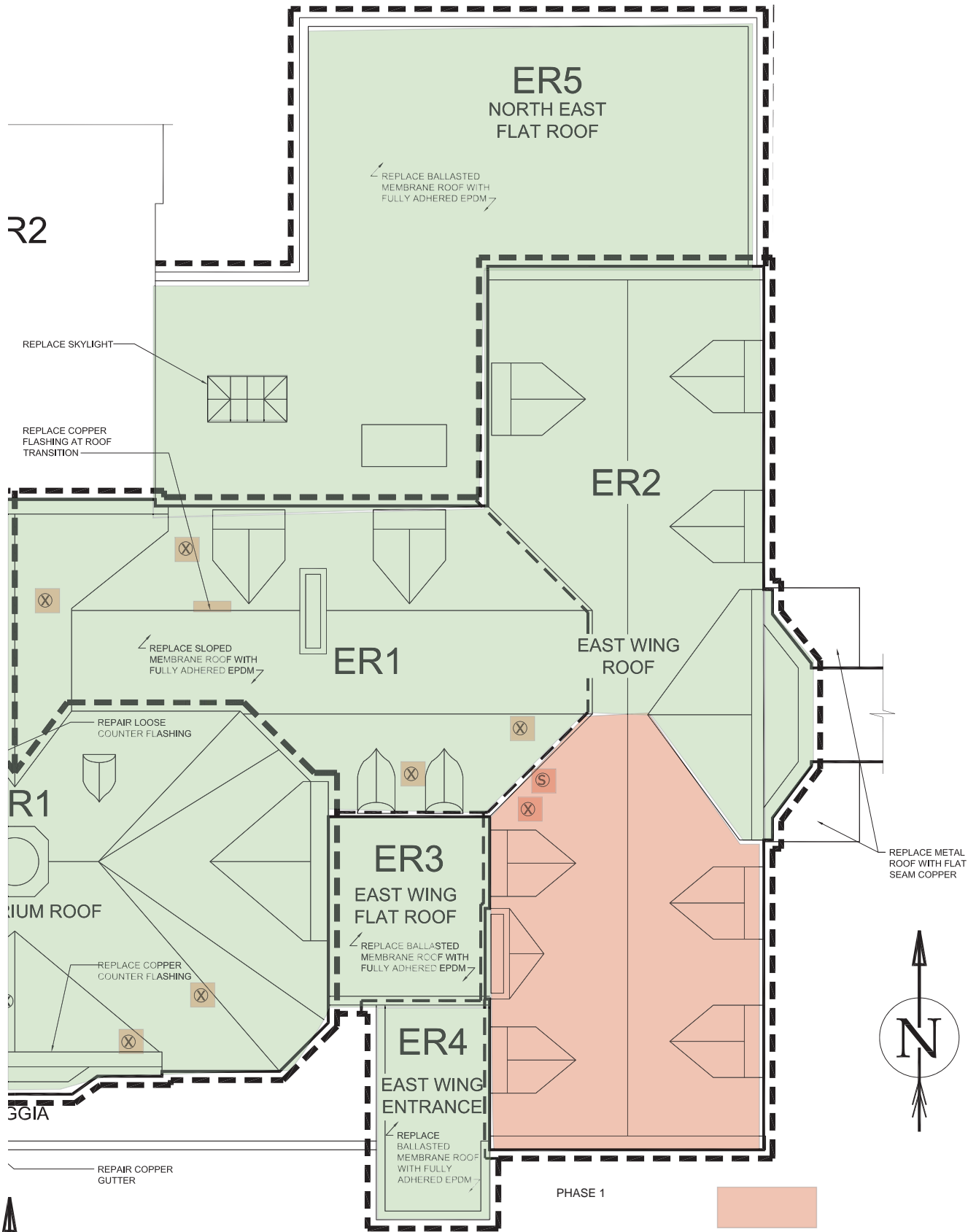


PHASE 4



PHASE 5





R2

REPLACE SKYLIGHT

REPLACE COPPER FLASHING AT ROOF TRANSITION

REPLACE SLOPED MEMBRANE ROOF WITH FULLY ADHERED EPDM

REPAIR LOOSE COUNTER FLASHING

R1

MEZANINE ROOF

REPLACE COPPER COUNTER FLASHING

3GIA

REPAIR COPPER GUTTER

REPLACE BALLASTED MEMBRANE ROOF WITH FULLY ADHERED EPDM

ER5
NORTH EAST
FLAT ROOF

ER2

EAST WING
ROOF

ER3
EAST WING
FLAT ROOF

REPLACE BALLASTED MEMBRANE ROOF WITH FULLY ADHERED EPDM

ER4
EAST WING
ENTRANCE


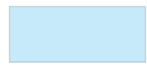
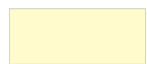

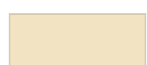
REPLACE BALLASTED MEMBRANE ROOF WITH FULLY ADHERED EPDM

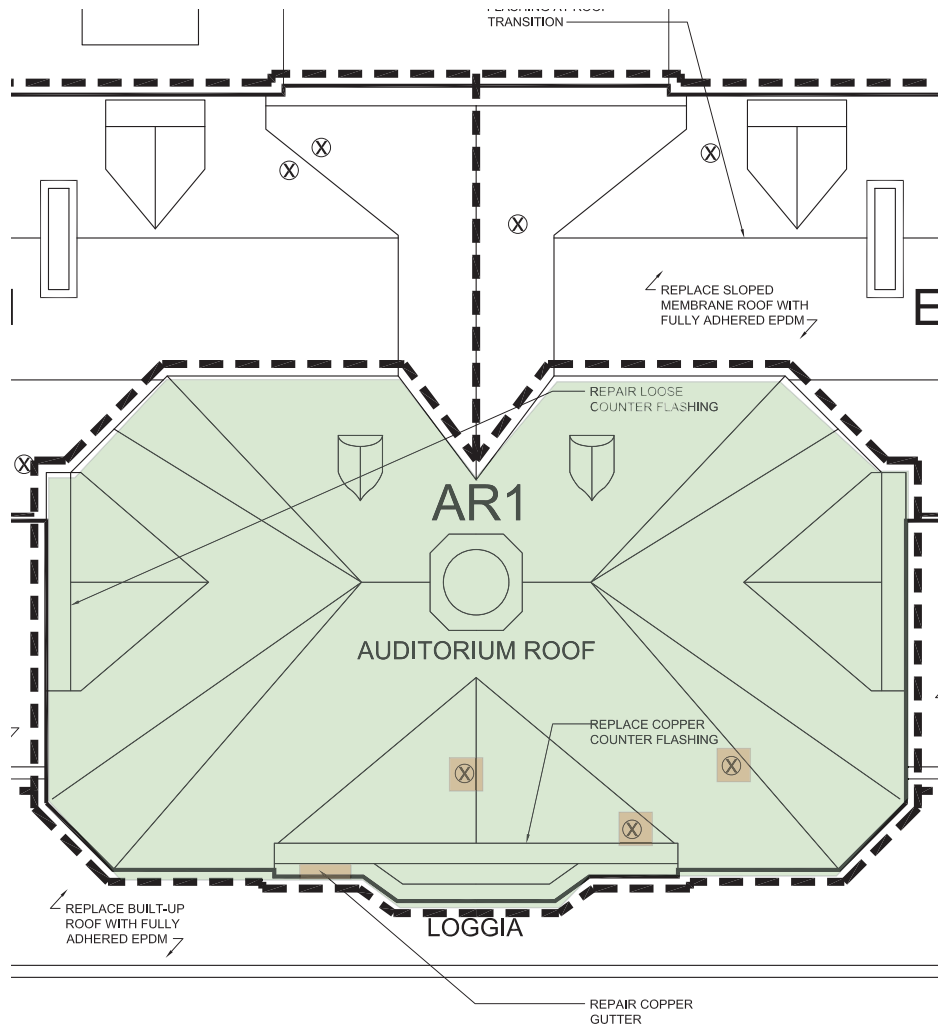
REPLACE METAL ROOF WITH FLAT SEAM COPPER



SLATE REPAIR WORK


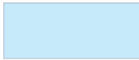

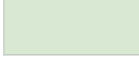

- ⊗ MISSING SLATE TO BE REPLACED
- ⓑ BROKEN SLATE TO BE REPLACED
- Ⓢ SLIPPED SLATE TO BE RESET

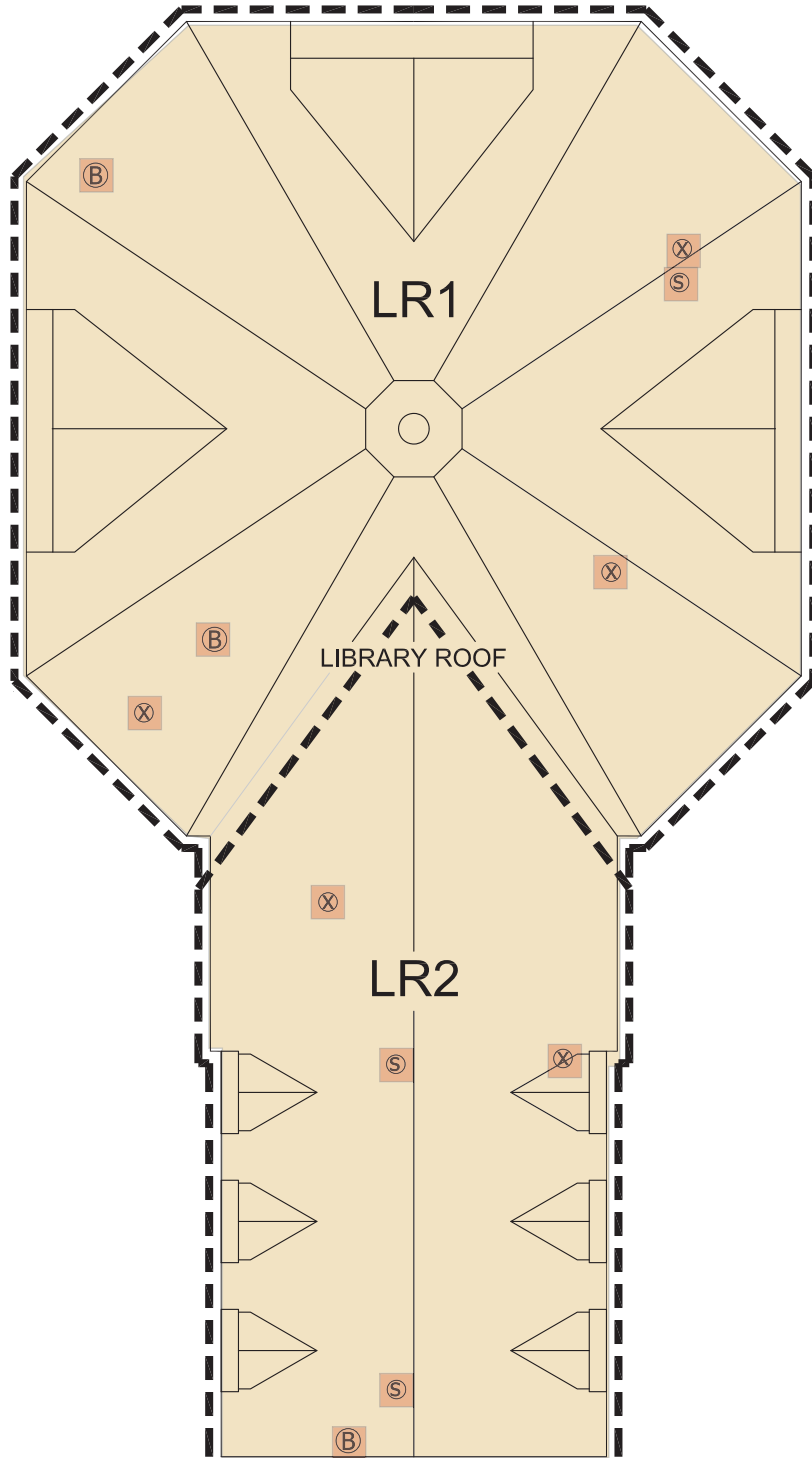
PHASE 1	
PHASE 2	
PHASE 3	
PHASE 4	
PHASE 5	




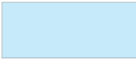
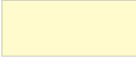
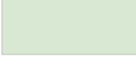
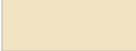
SLATE REPAIR WORK

- ⊗ MISSING SLATE TO BE REPLACED
- ⓑ BROKEN SLATE TO BE REPLACED
- Ⓢ SLIPPED SLATE TO BE RESET

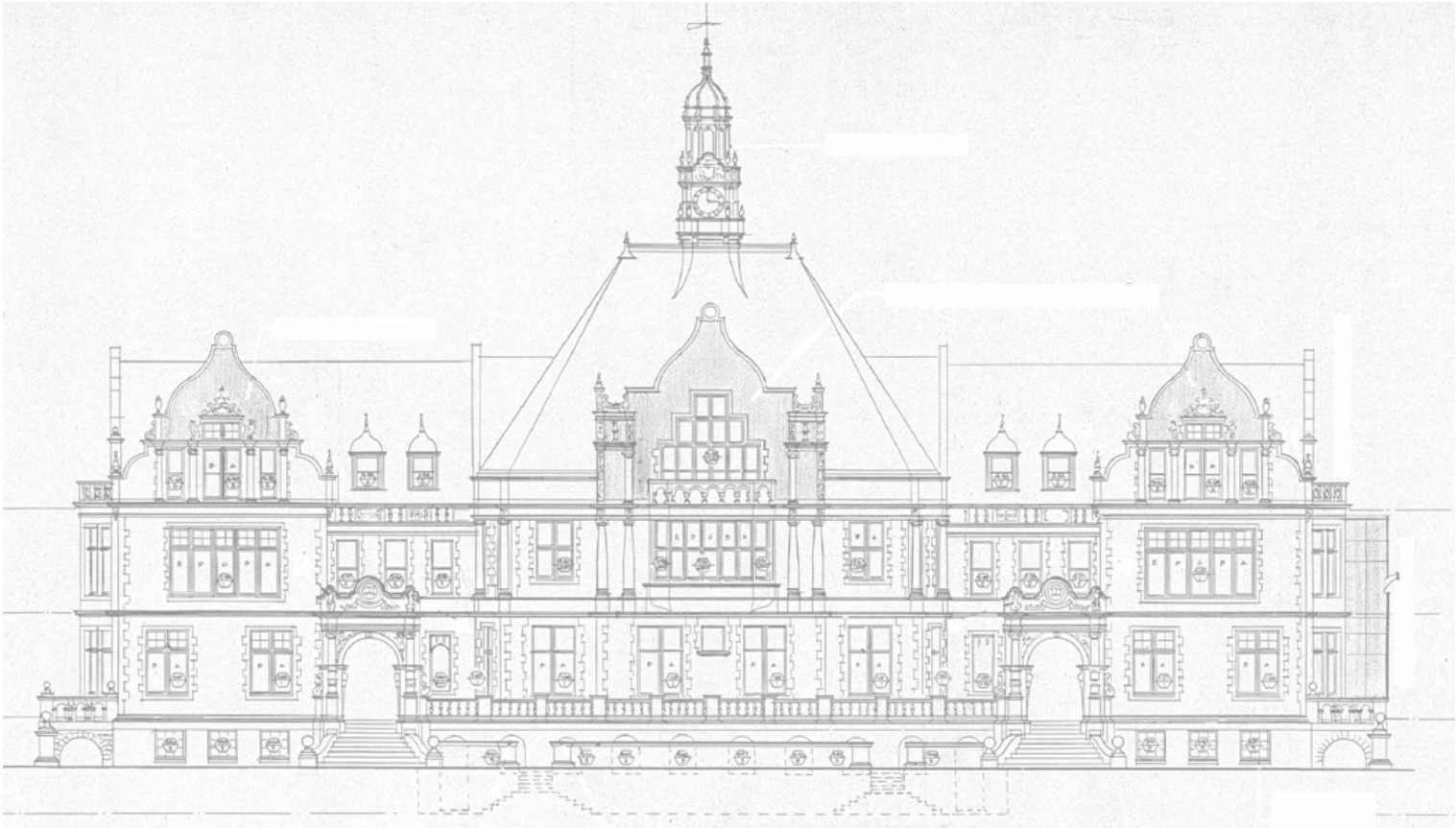
PHASE 1	
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PHASE 4	
PHASE 5	


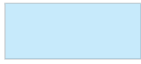

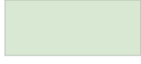



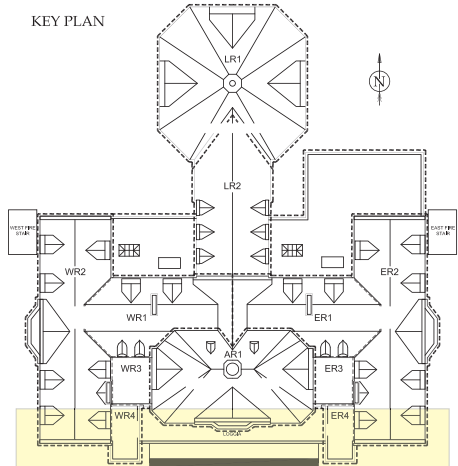
SLATE REPAIR WORK	
X	MISSING SLATE TO BE REPLACED
B	BROKEN SLATE TO BE REPLACED
S	SLIPPED SLATE TO BE RESET

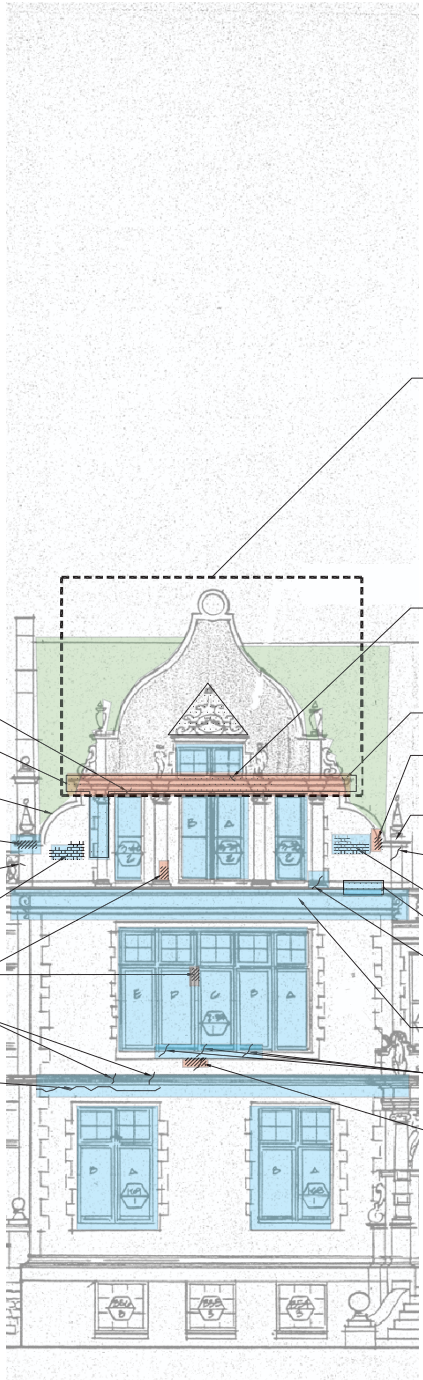
1	
PHASE 2	
PHASE 3	
PHASE 4	
PHASE 5	

South Elevation



- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 
- PHASE 5 





- GABLE SCOPE OF WORK:
- DISASSEMBLE GABLE MASONRY TO THIRD FLOOR WINDOWS.
 - REPLACE EXFOLIATED STEEL LINTEL
 - RECONSTRUCT GABLE

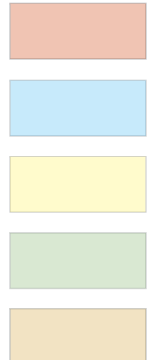
- REPAIR CRACKED LIMESTONE LINTEL
- REPOINT LIMESTONE MORTAR JOINTS
- RESET DISPLACED COPING WITH LEAD TEE CAPS
- REPAIR SPALLED LIMESTONE
- REPAIR CRACKED LIMESTONE
- REPLACE SIX COURSES OF DISPLACED BRICK
- REPAIR SPALLED LIMESTONE
- REPAIR CRACKED LIMESTONE
- LARGE DISPLACED CRACK FILLED WITH COMPOUND

- REPAIR CRACKED LIMESTONE WINDOW SILL
- REPAIR CRACKED LIMESTONE
- REPAIR SPALLED LIMESTONE
- RESET LIFTED CORNER BLOCK
- REPAIR CRACKED LIMESTONE
- REPLACE DISPLACED BRICKS
- REPOINT LIMESTONE MORTAR JOINTS
- REPAIR CRACKED LIMESTONE
- ALL CORNICE JOINTS OPEN, RAKE AND REPOINT
- REPAIR SEALANT FILLED CRACKS
- REPLACE CRACKED BRICKS

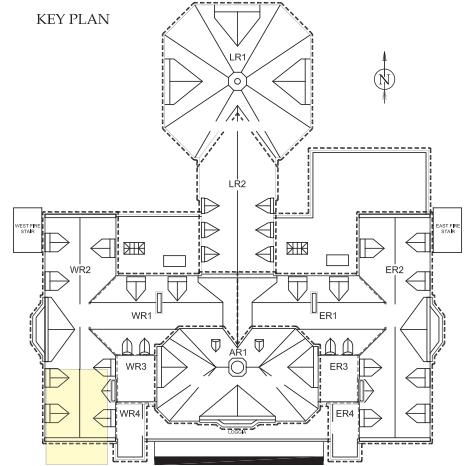
S1



- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5



KEY PLAN



REPAIR SPALLED LIMESTONE

REPLACE COPPER FLASHING ON SOUTH FACE OF CHIMNEY

ALL CORNICE JOINTS OPEN, RAKE AND REPOINT

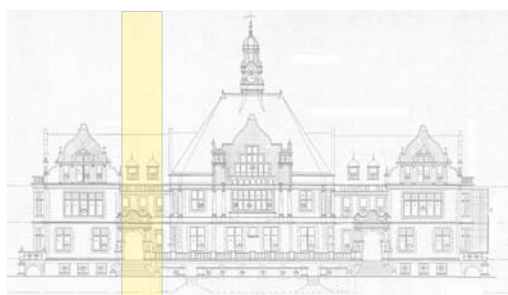
REPOINT LIMESTONE MORTAR JOINTS

REPLACE 5 CAST STONE BALUSTERS WITH LIMESTONE

REPOINT BRICK CHIMNEY (ALL FOUR SIDES)

NEW COPPER DOWNSPOUT WITH FLANK COLLECTOR BOX

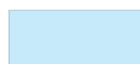
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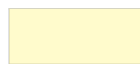
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PHASE 2



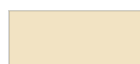
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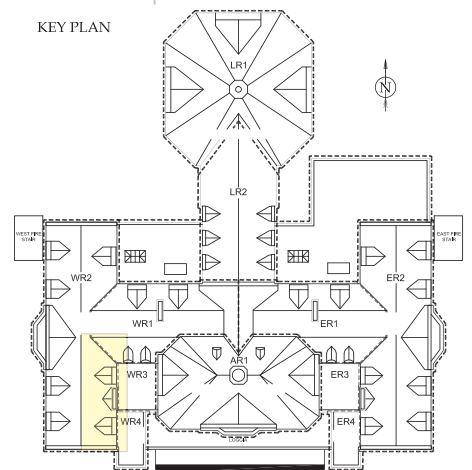
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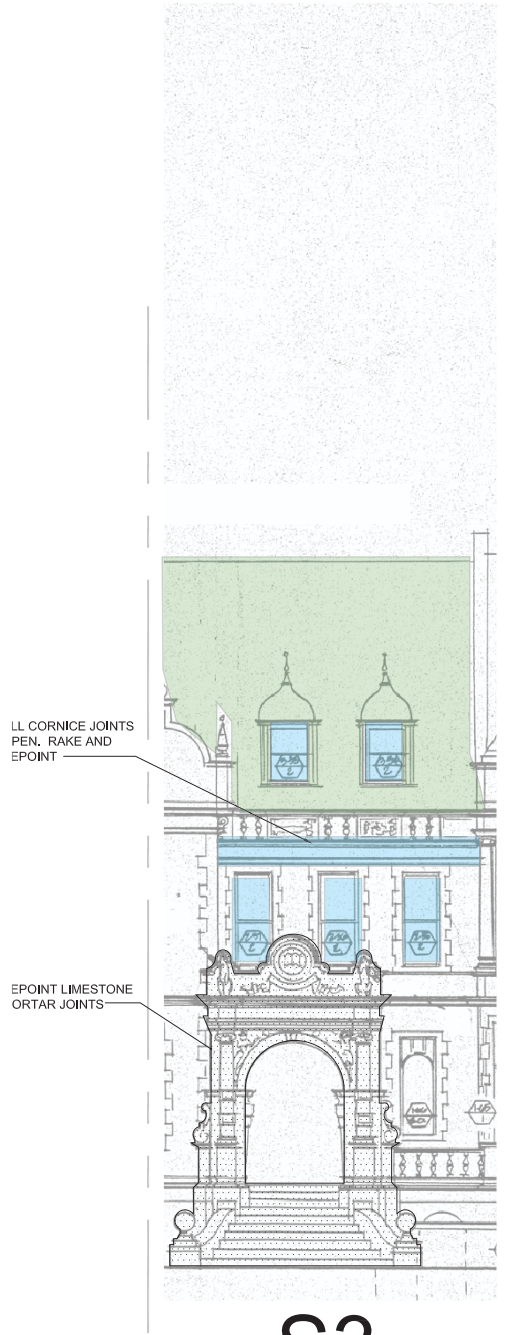


PHASE 5



KEY PLAN





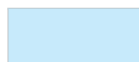
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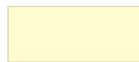
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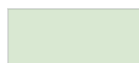
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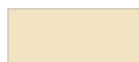
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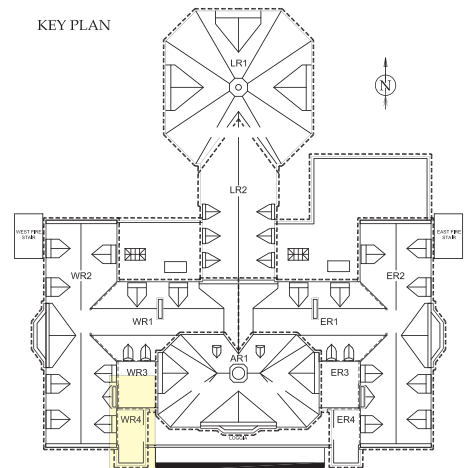
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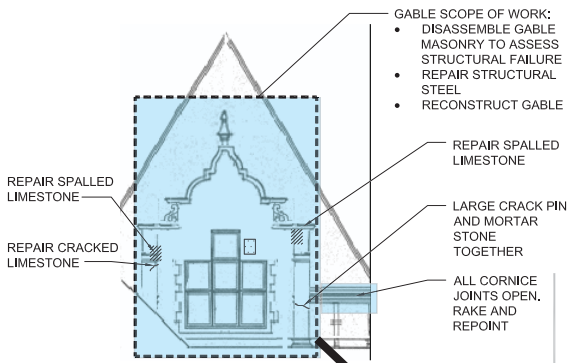


PHASE 5

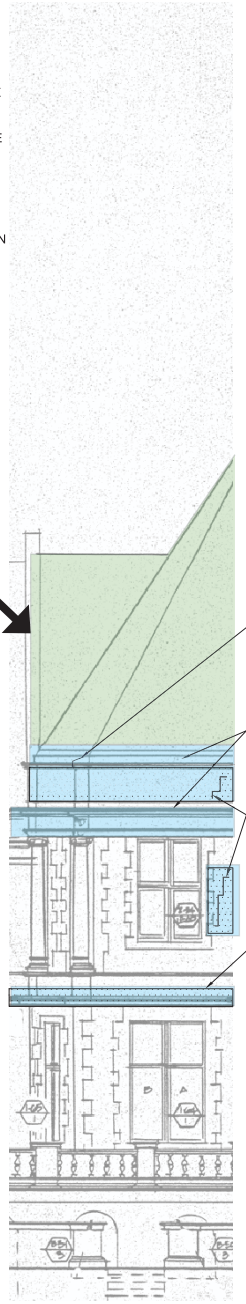


KEY PLAN





S4A



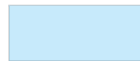
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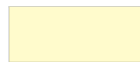
PHASE 1



PHASE 2



PHASE 3



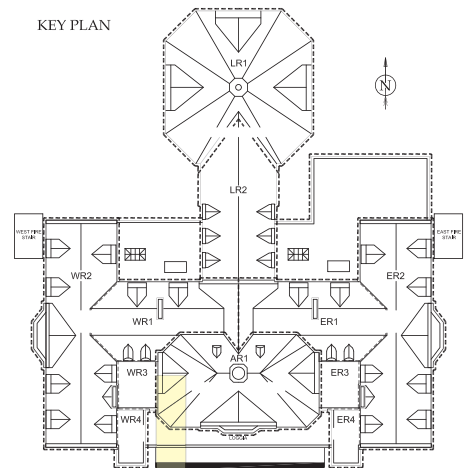
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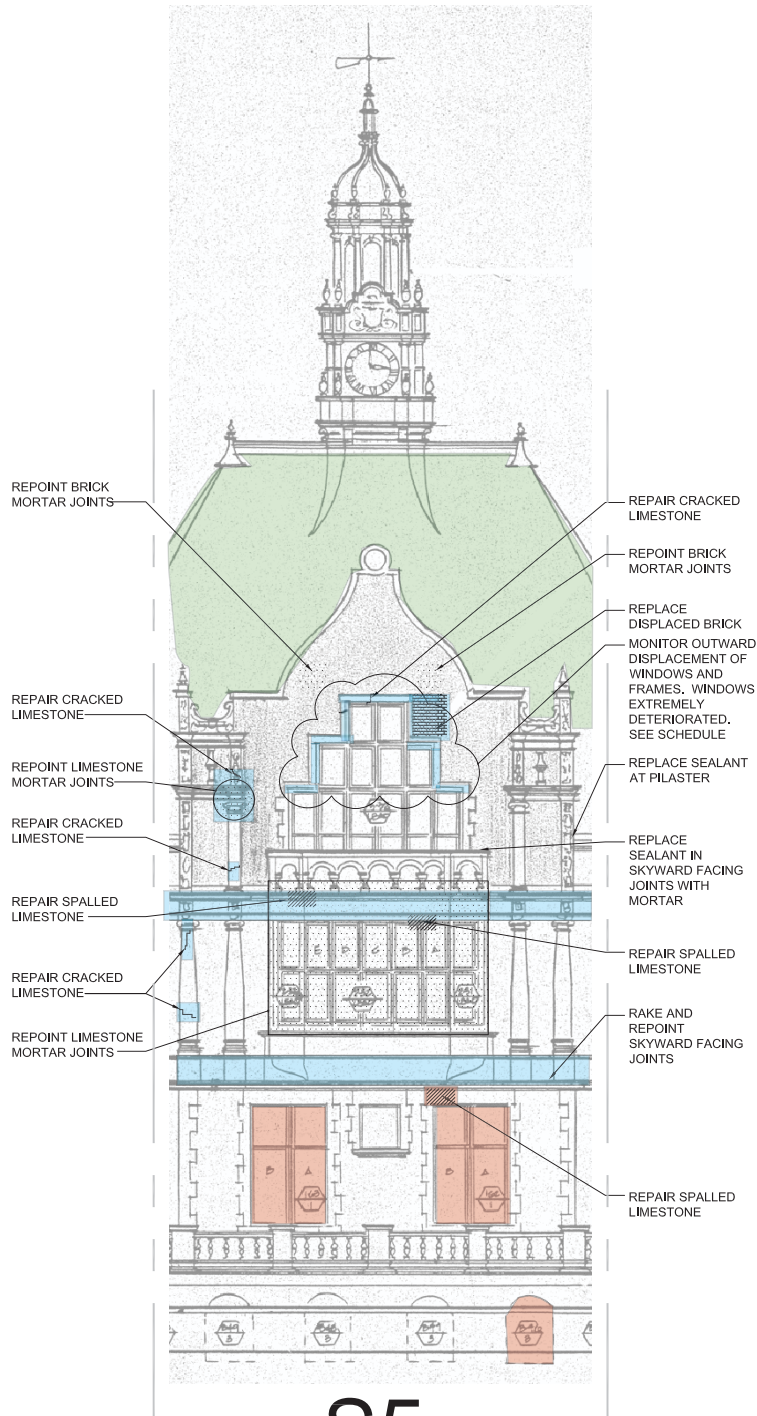


PHASE 5



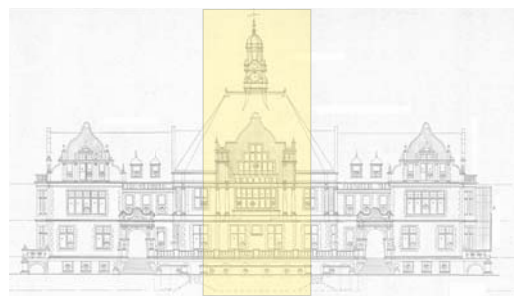
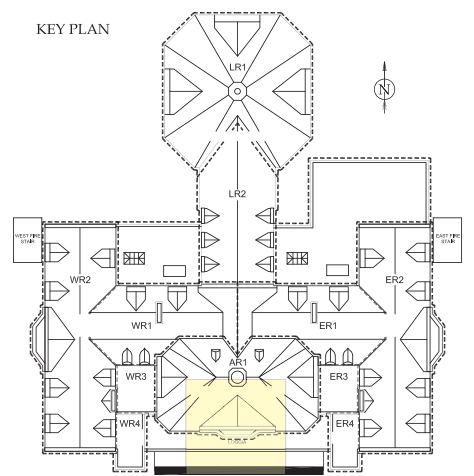
KEY PLAN



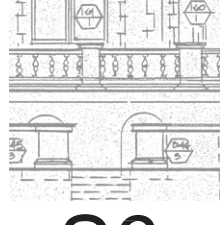
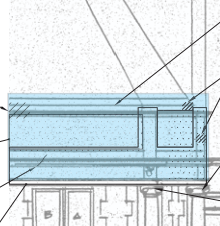
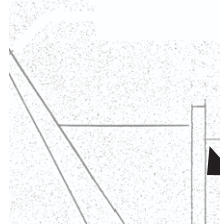


S5

KEY PLAN



- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5



S6

- GABLE SCOPE OF WORK:
 - DISASSEMBLE GABLE MASONRY TO ASSESS STRUCTURAL FAILURE
 - REPAIR STRUCTURAL STEEL
 - RECONSTRUCT GABLE
- LARGE CRACK PIN AND MORTAR STONE TOGETHER
- ALL CORNICE JOINTS OPEN. RAKE AND REPOINT
- REPOINT LIMESTONE MORTAR JOINTS
- REPAIR SPALLED LIMESTONE

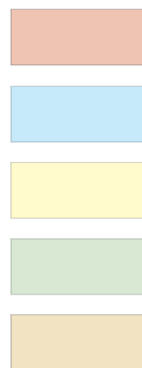
S6A

- REPAIR SPALLED LIMESTONE
- REPOINT BRICK MORTAR JOINTS
- REPAIR CRACKED LIMESTONE
- REPOINT LIMESTONE MORTAR JOINTS

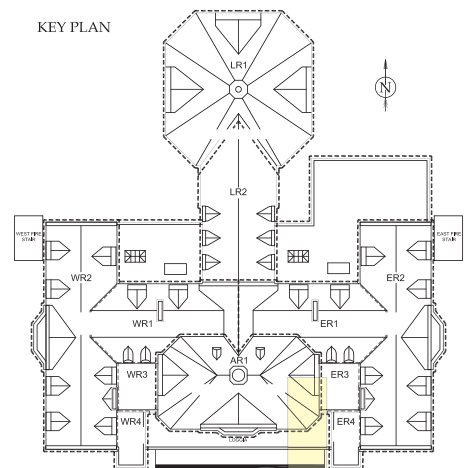
- ALL CORNICE JOINTS OPEN. RAKE AND REPOINT
- REPAIR SPALLED LIMESTONE
- RESET COLUMN CAPITAL
- REPAIR CRACK IN COLUMN



- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5



KEY PLAN





ALL CORNICE JOINTS
OPEN, RAKE AND
REPOINT

RESET DISPLACED
ORNAMENTAL
FIGURE

RESET DISPLACED
ORNAMENTAL
FIGURE

REPOINT
LIMESTONE
MORTAR JOINTS

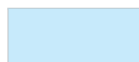
S7



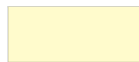
PHASE 1



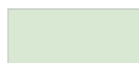
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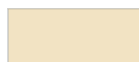
PHASE 3



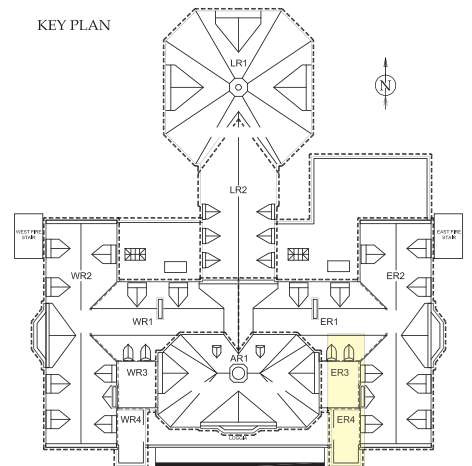
PHASE 4

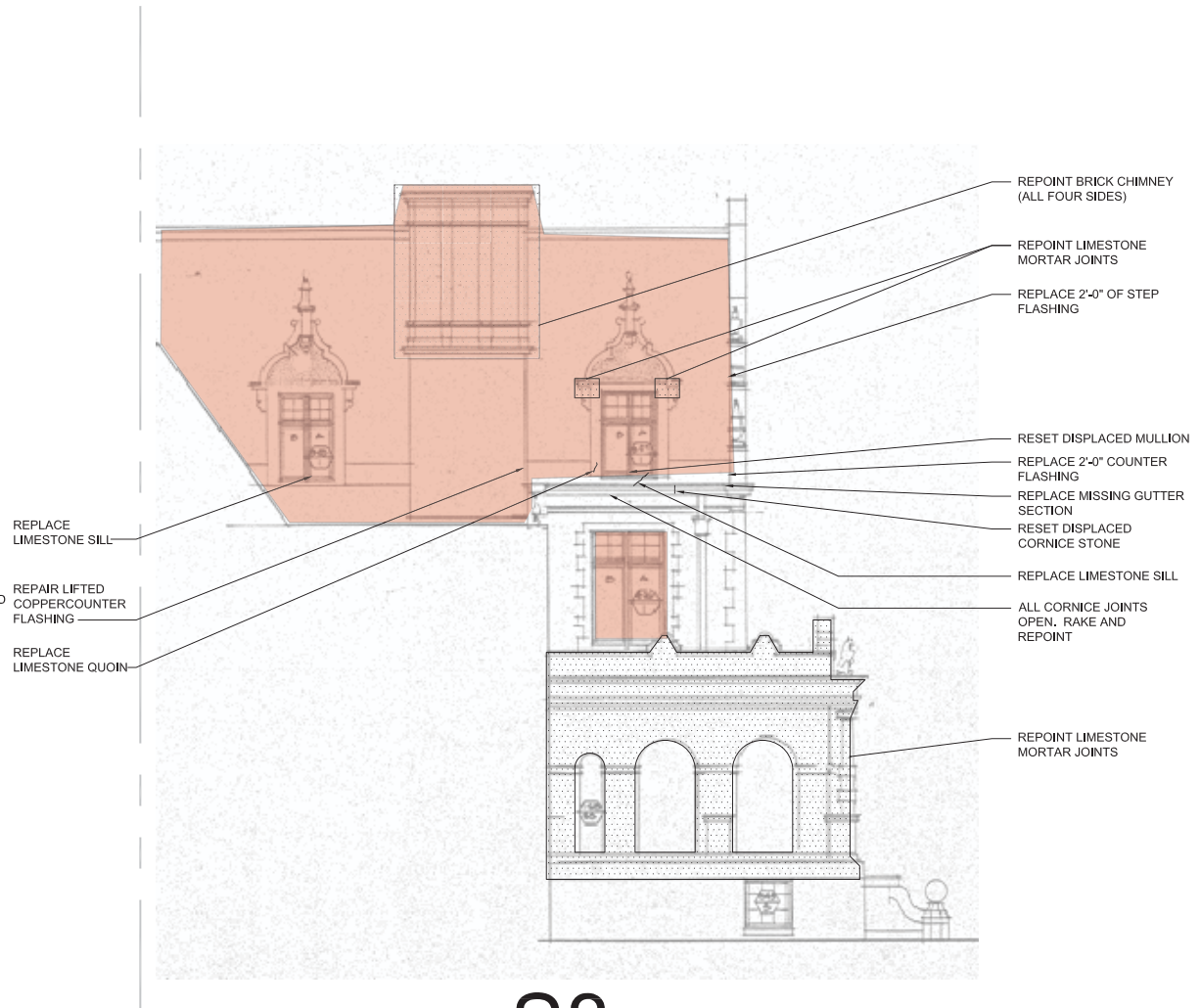


PHASE 5

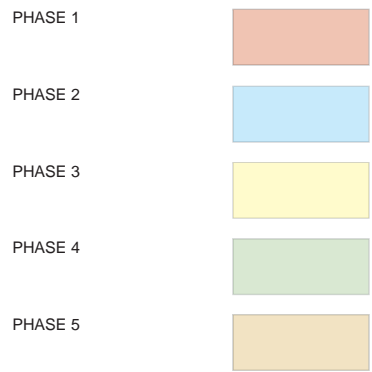


KEY PLAN

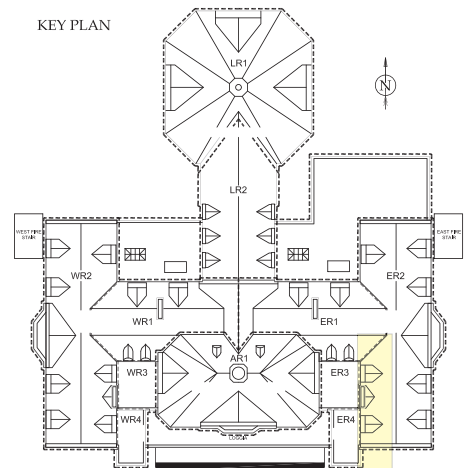


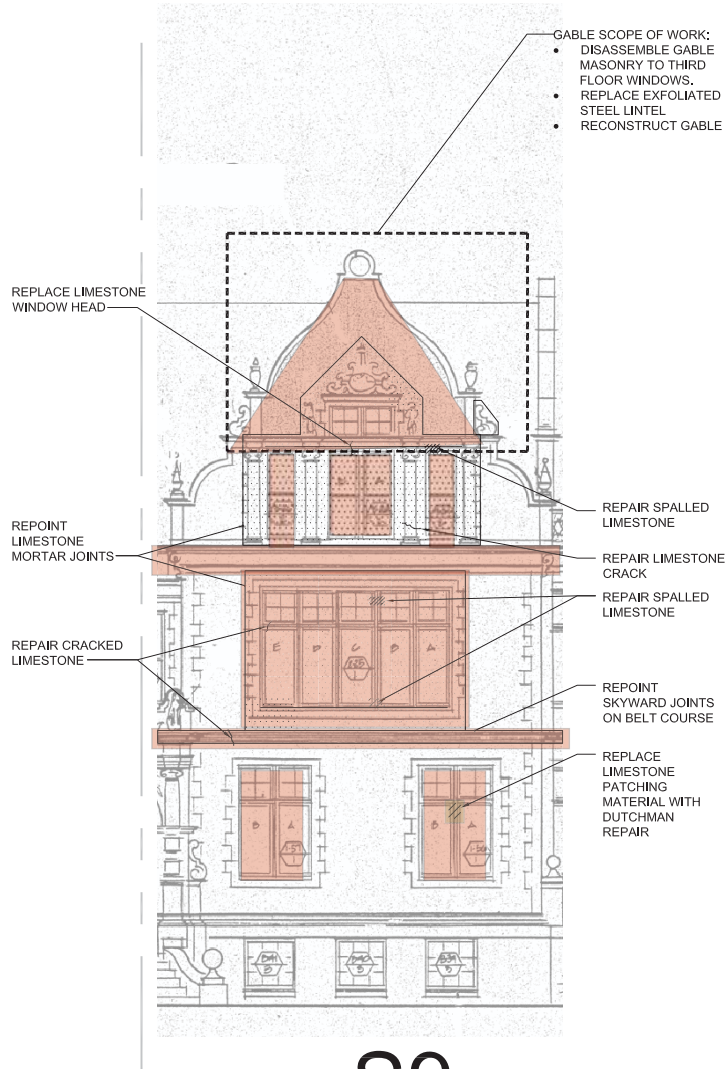


S8



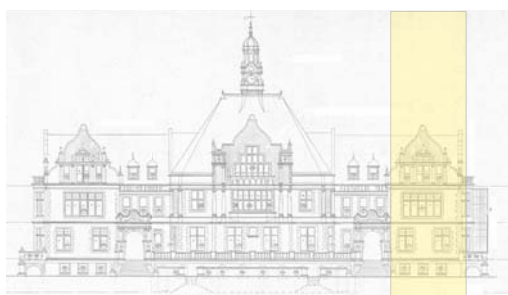
KEY PLAN



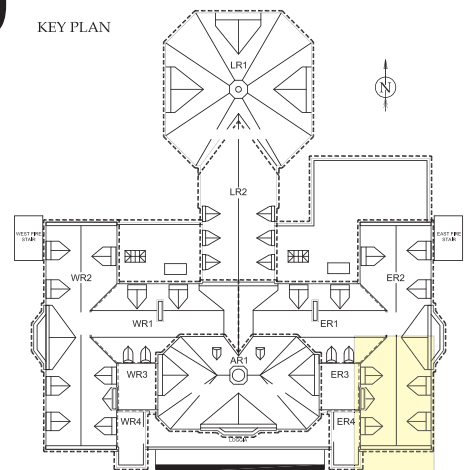
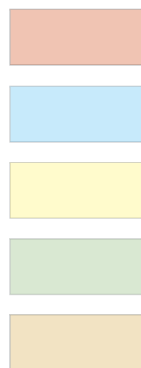


S9

KEY PLAN



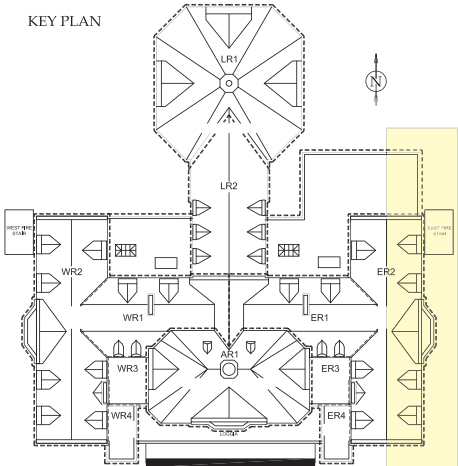
PHASE 1
PHASE 2
PHASE 3
PHASE 4
PHASE 5

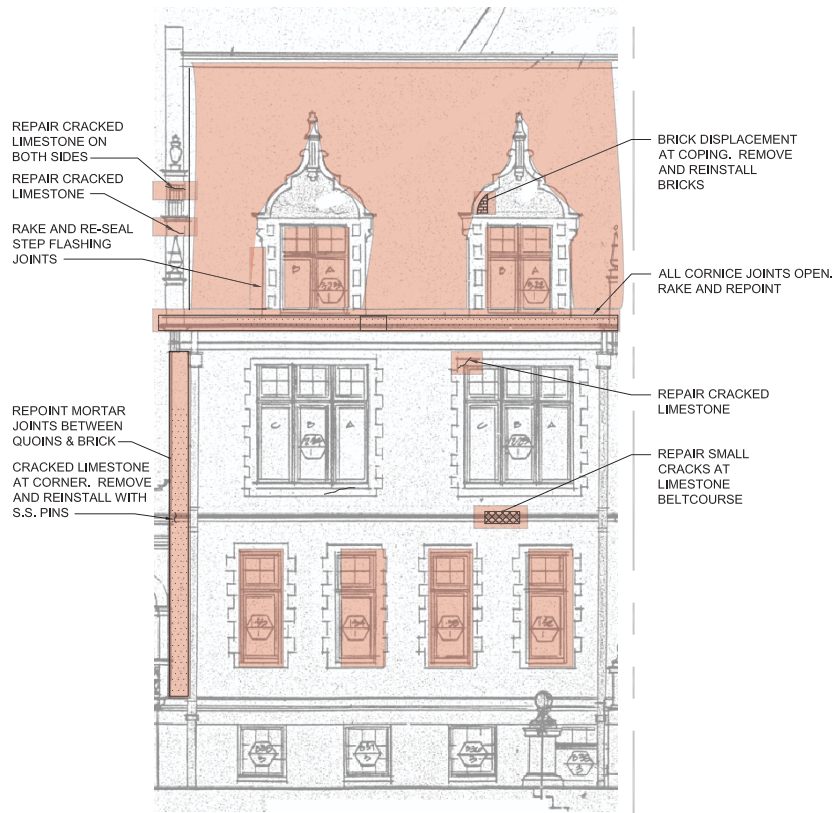


East Elevation



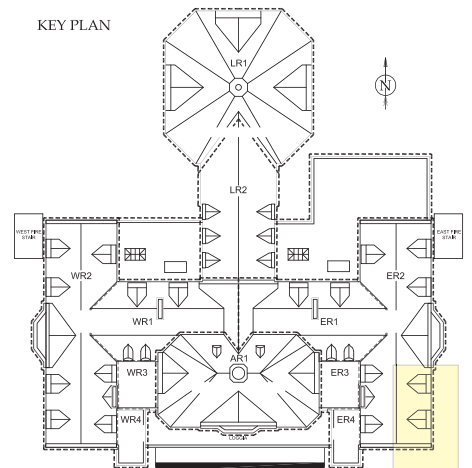
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5



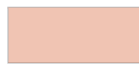


E1

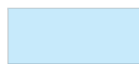
KEY PLAN



PHASE 1



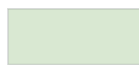
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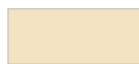
PHASE 3

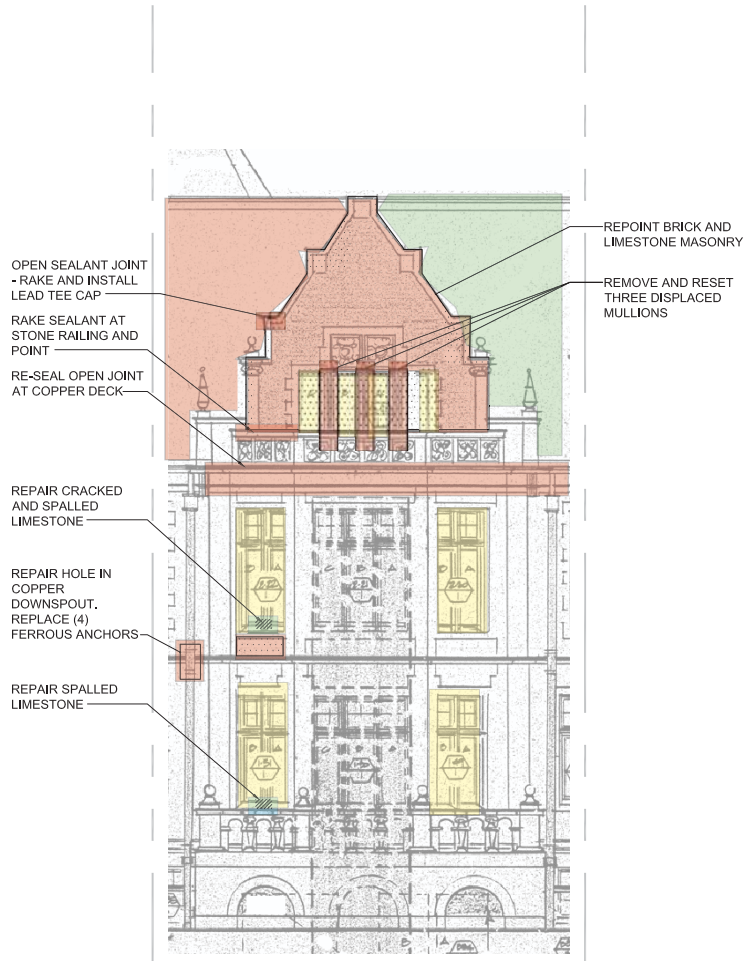


PHASE 4



PHASE 5



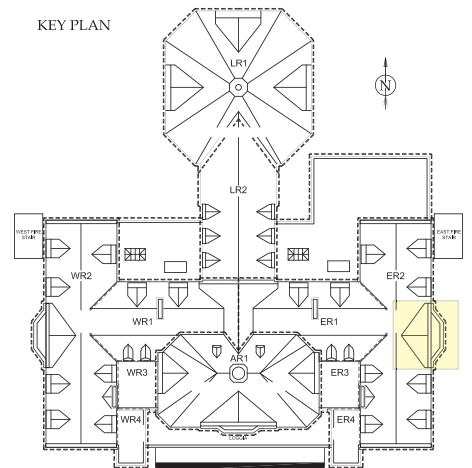


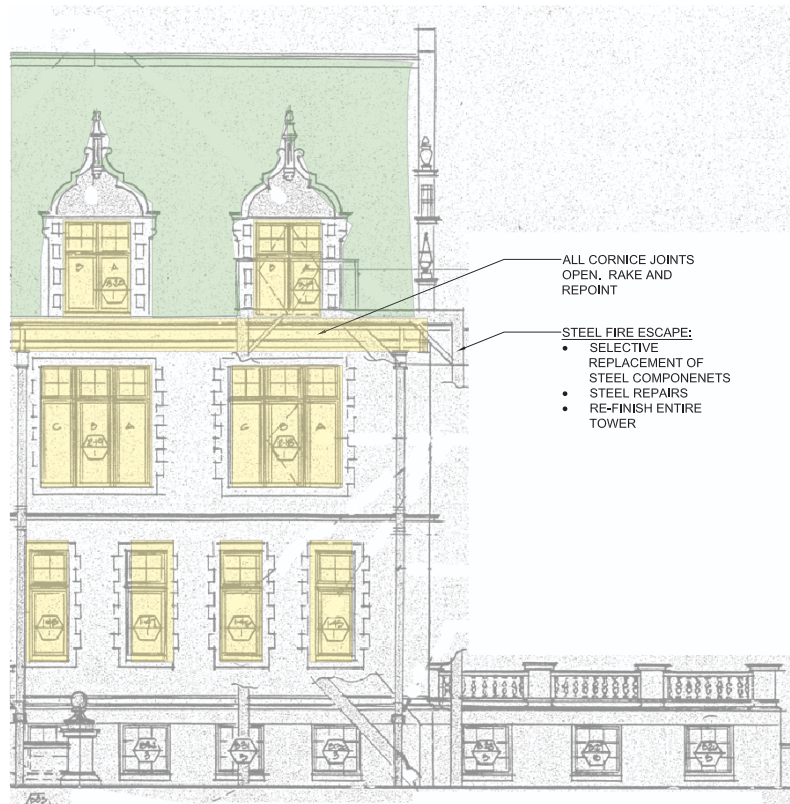
E2



- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5

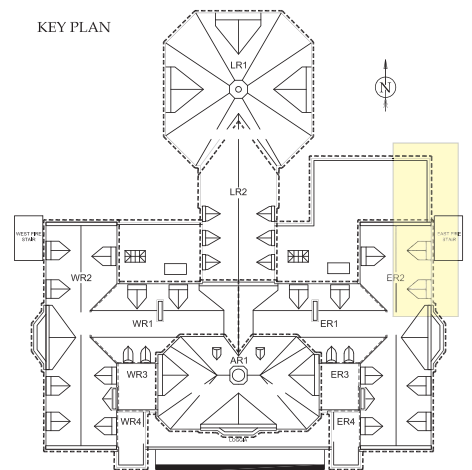
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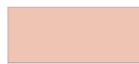


E3

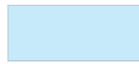
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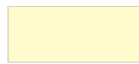
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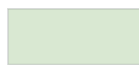
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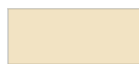
PHASE 3



PHASE 4



PHASE 5



North Elevation

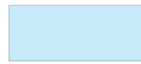


KEY PLAN

PHASE 1



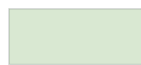
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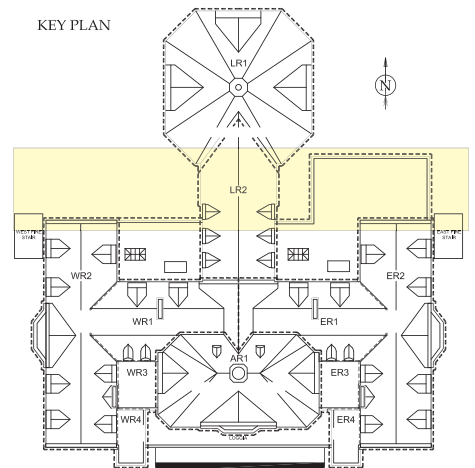
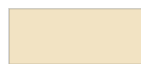
PHASE 3

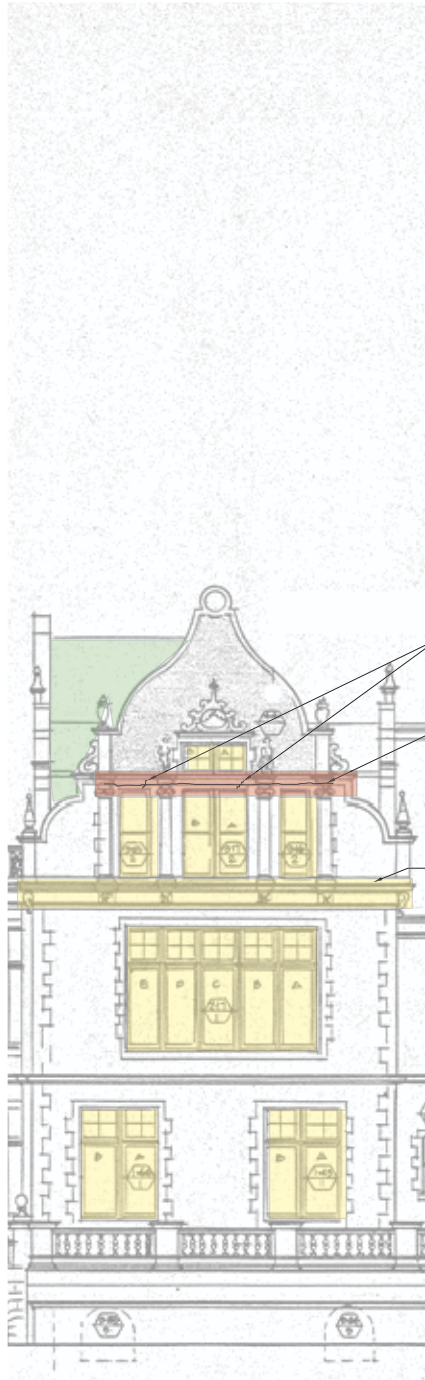


PHASE 4



PHASE 5





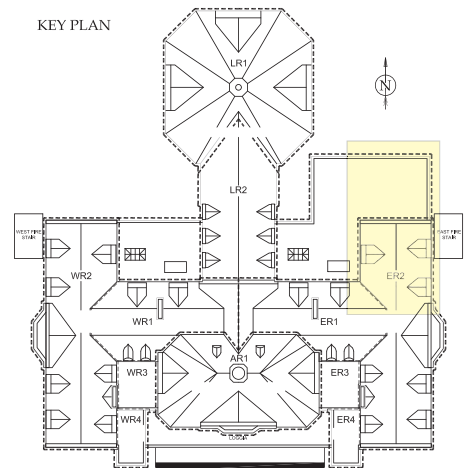
REPAIR CRACKS THROUGH LINTELS

REPOINT LINEAR LINEAR CRACKED JOINT

ALL CORNICE JOINTS OPEN, RAKE AND REPOINT

N1

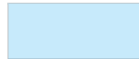
KEY PLAN



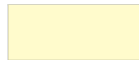
PHASE 1



HASE 2



HASE 3

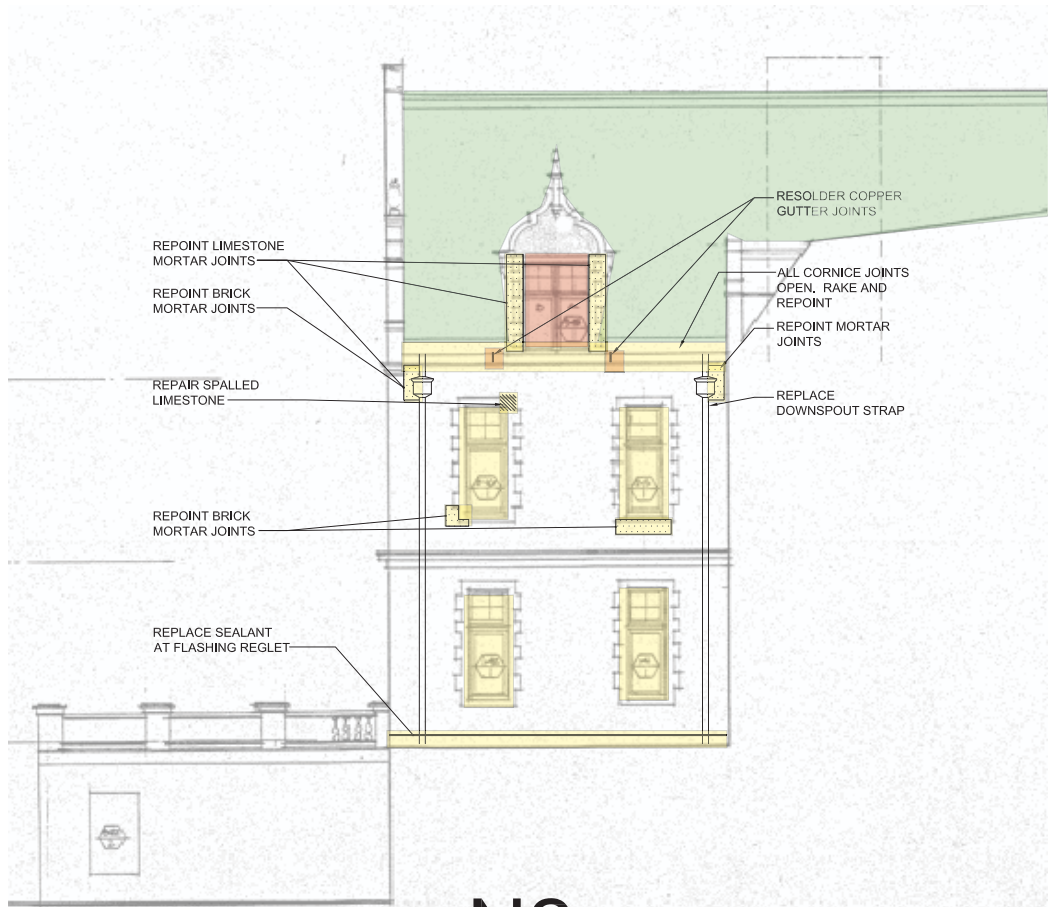


HASE 4



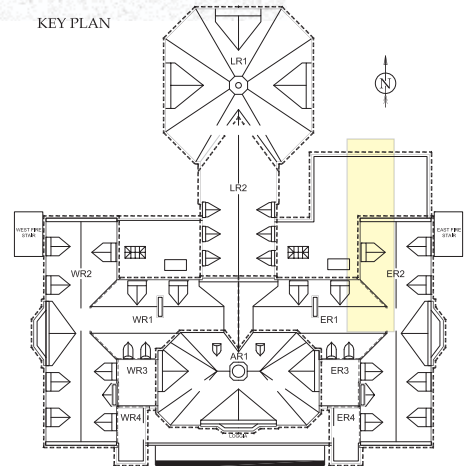
PHASE 5





N2

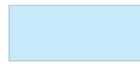
KEY PLAN



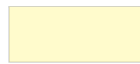
PHASE 1



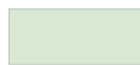
PHASE 2



PHASE 3

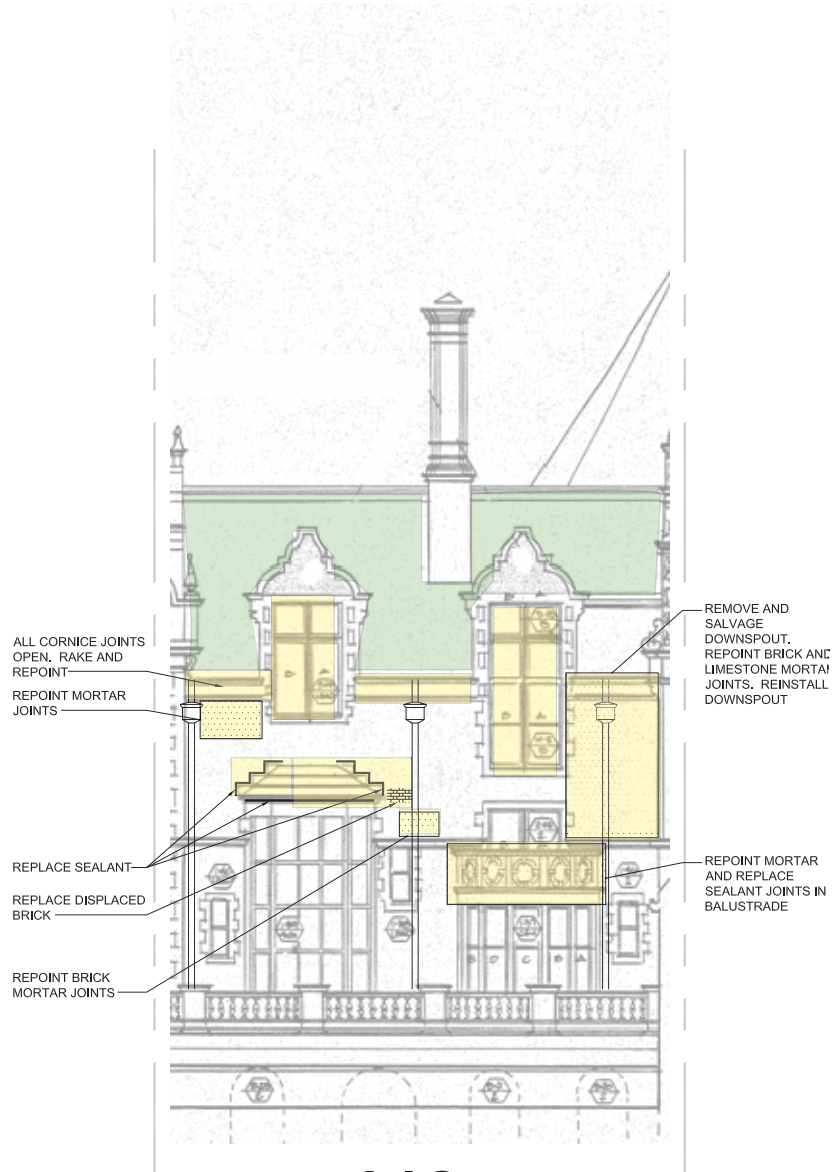


PHASE 4



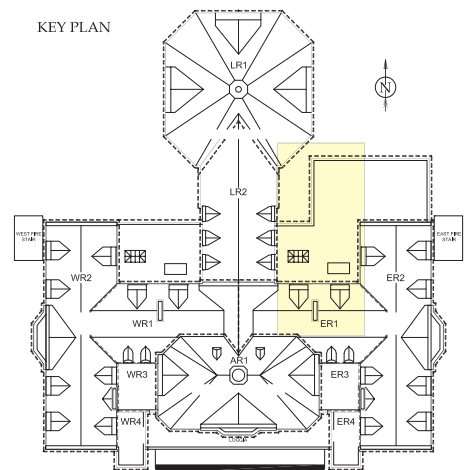
PHASE 5





N3

KEY PLAN



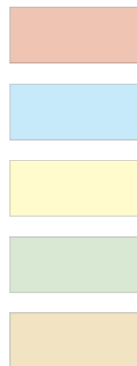
PHASE 1

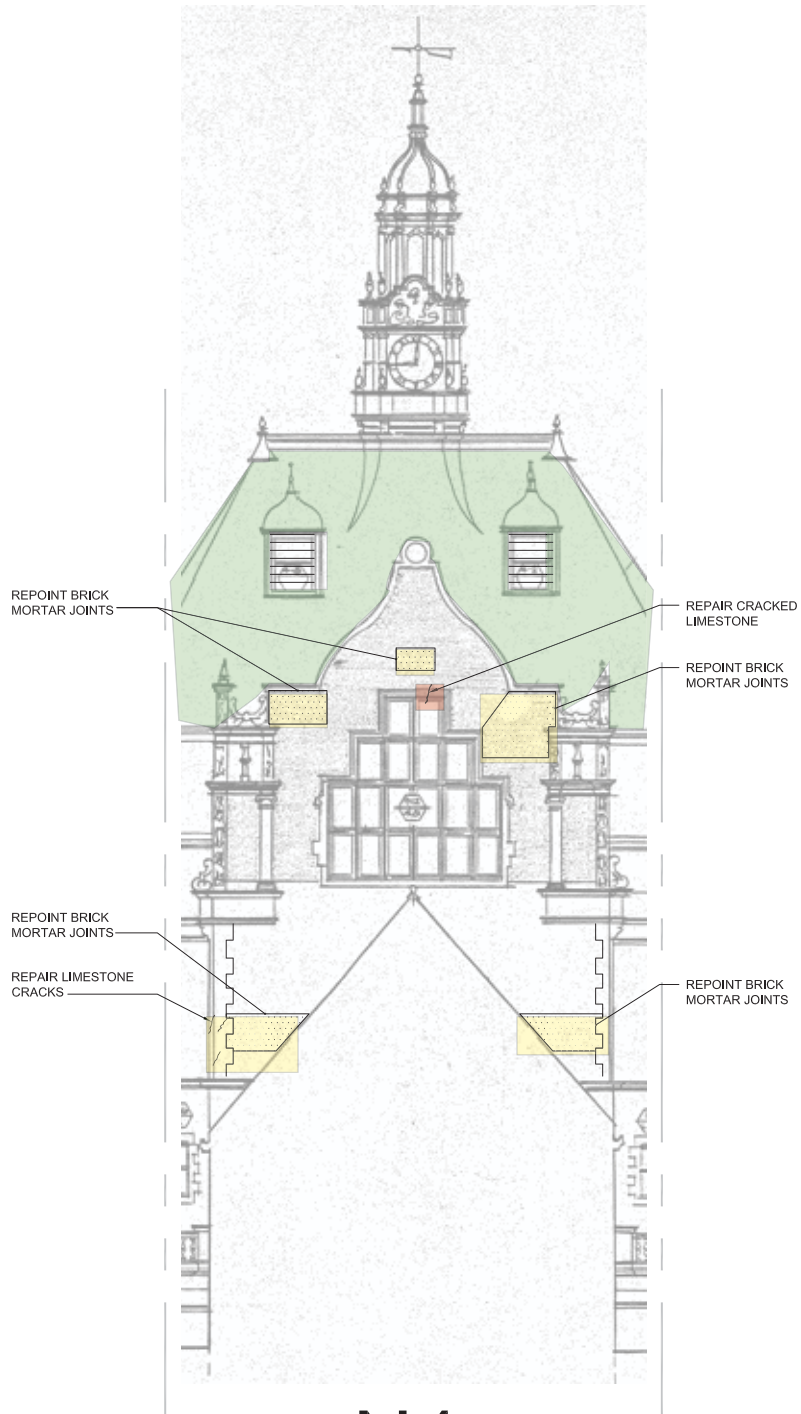
HASE 2

HASE 3

HASE 4

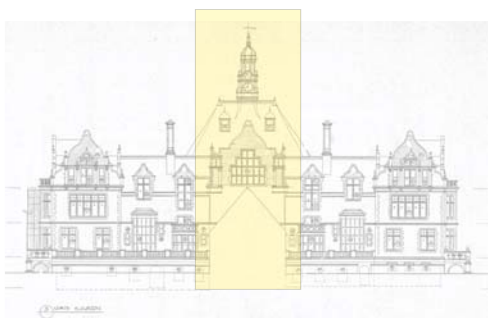
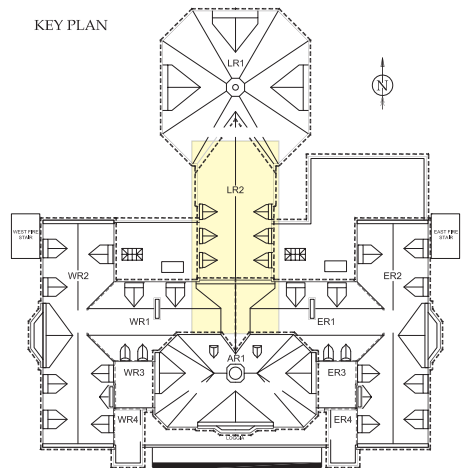
PHASE 5





N4

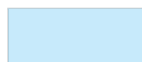
KEY PLAN



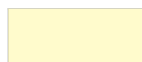
PHASE 1



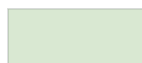
PHASE 2



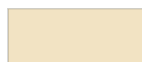
PHASE 3

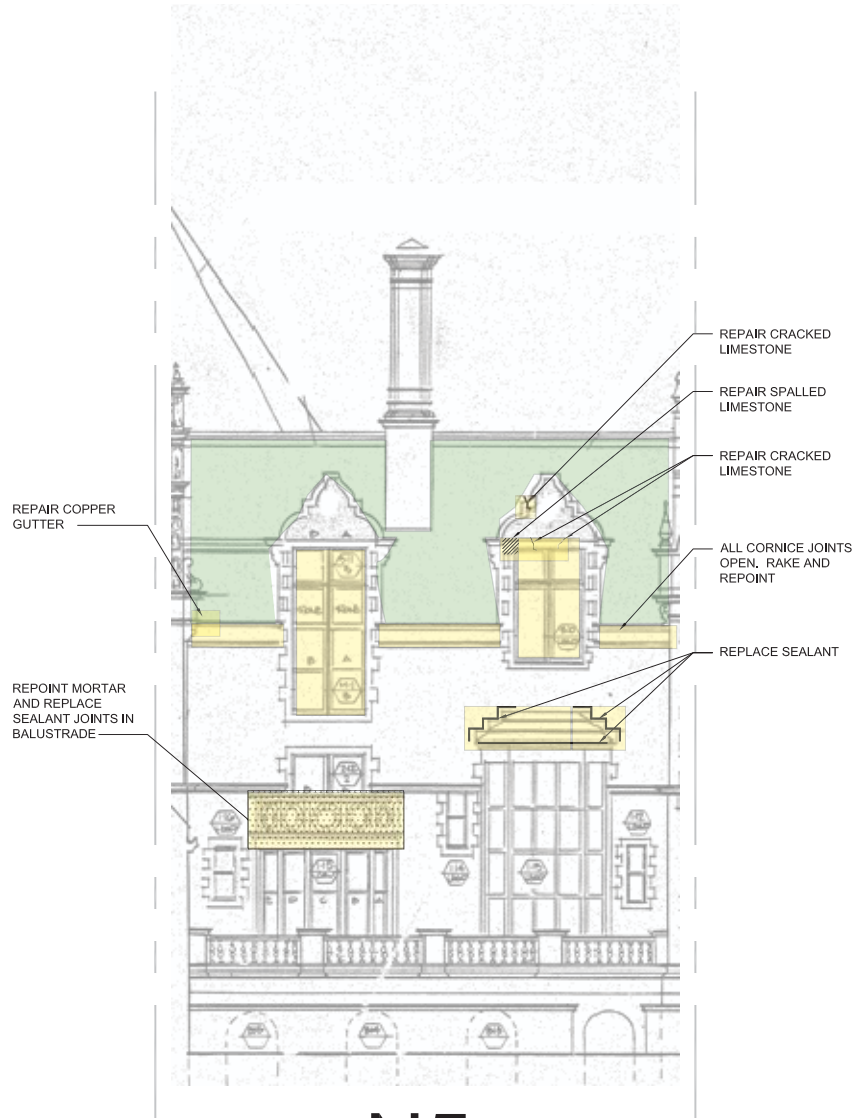


PHASE 4



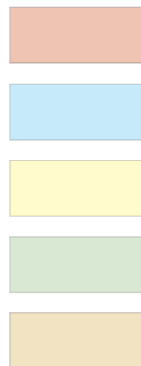
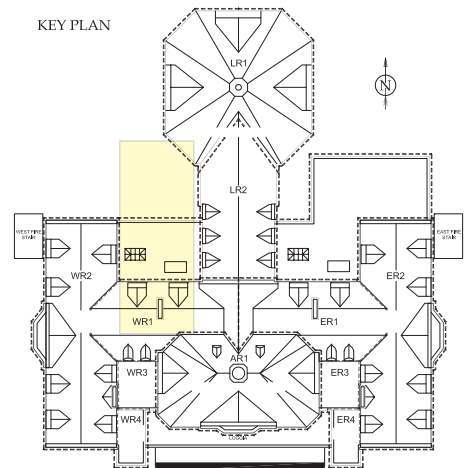
PHASE 5

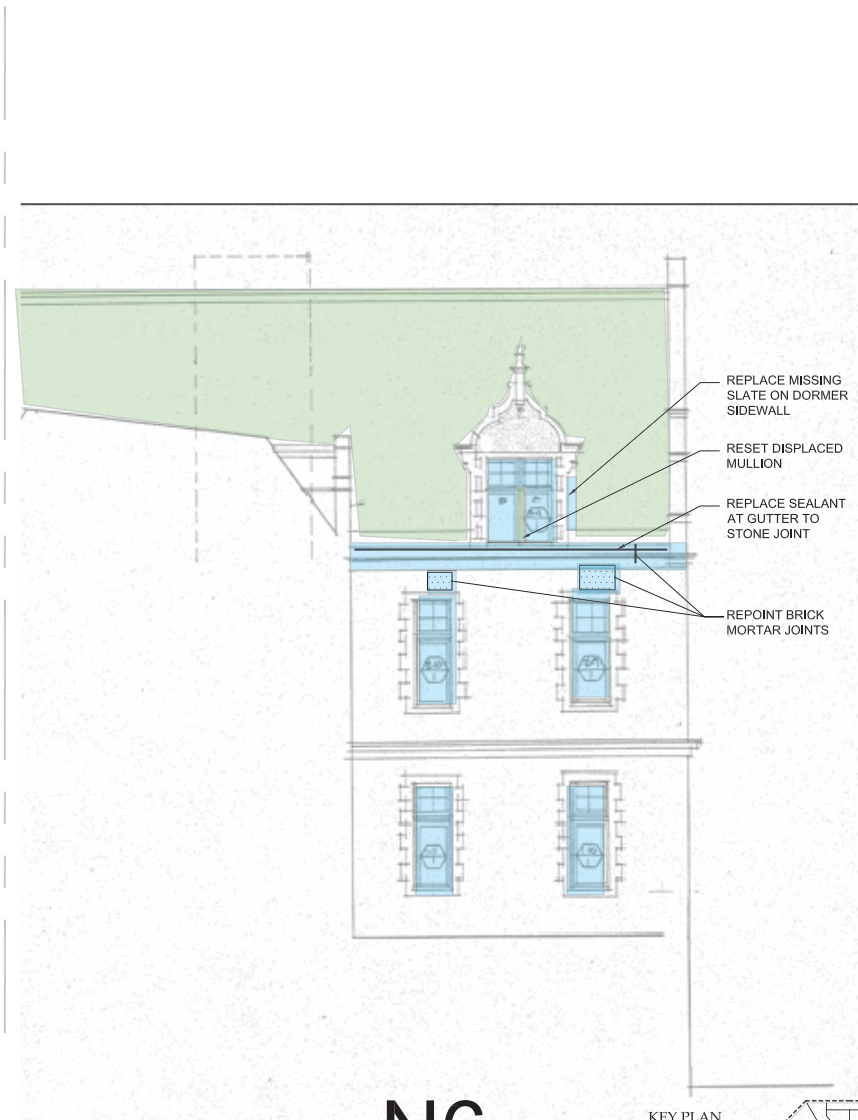




N5

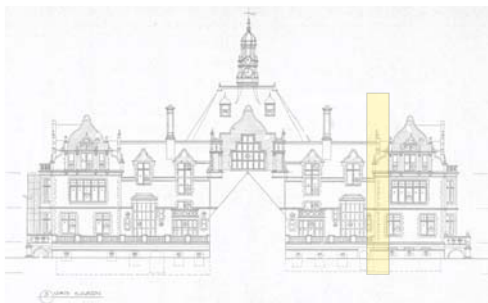
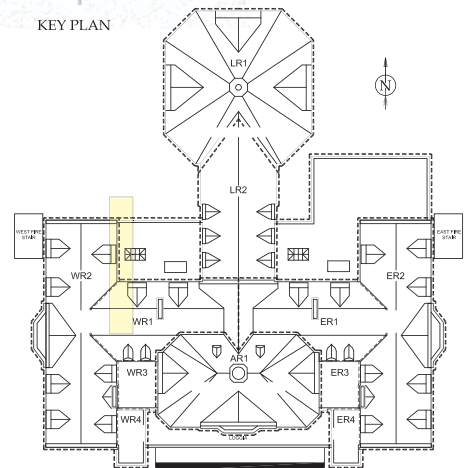
KEY PLAN





N6

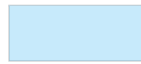
KEY PLAN



PHASE 1



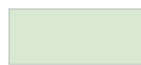
PHASE 2



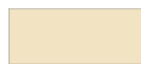
PHASE 3

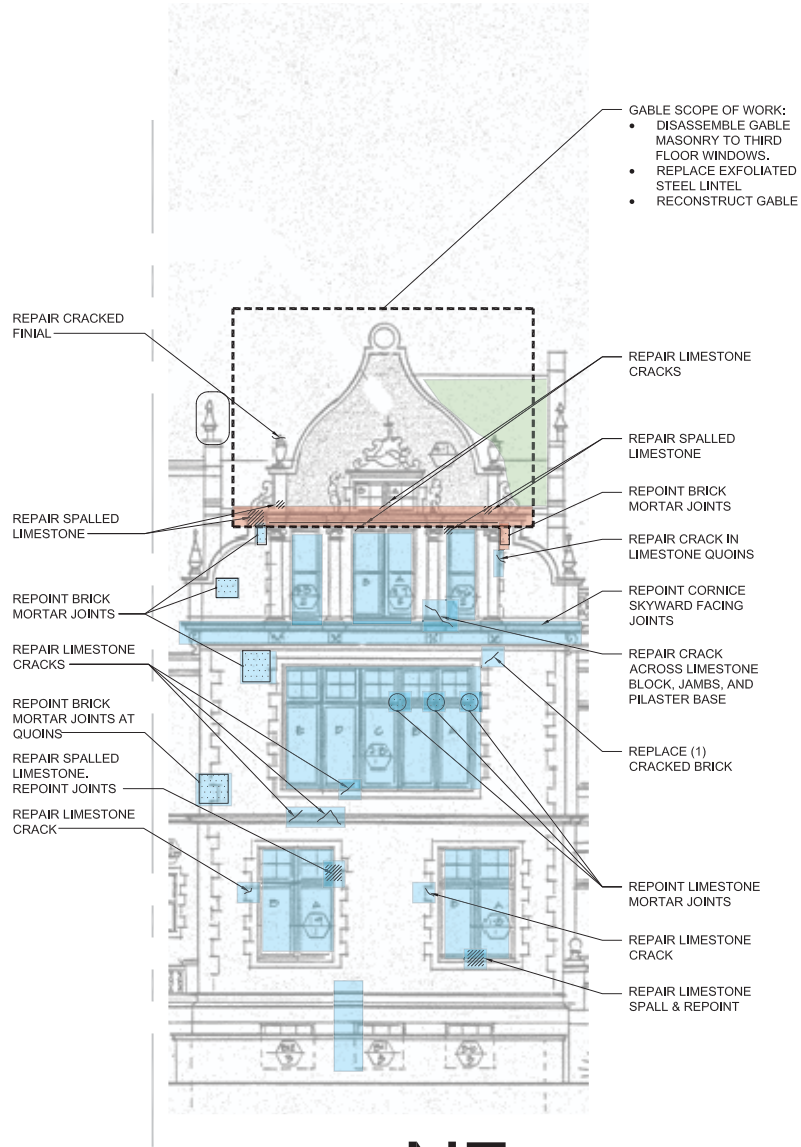


PHASE 4



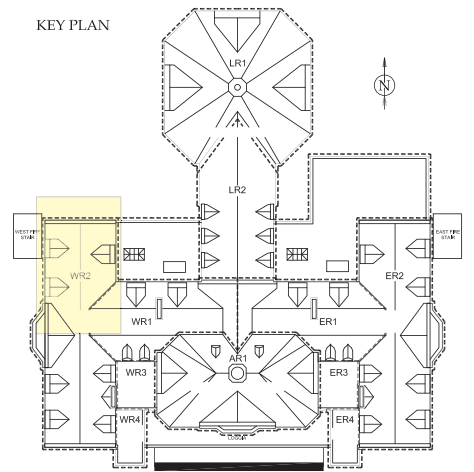
PHASE 5



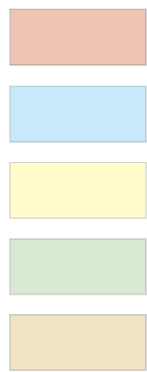


N7

KEY PLAN



- PHASE 1
- HASE 2
- HASE 3
- HASE 4
- PHASE 5

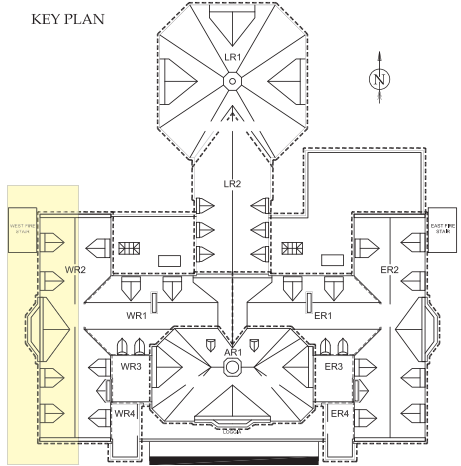


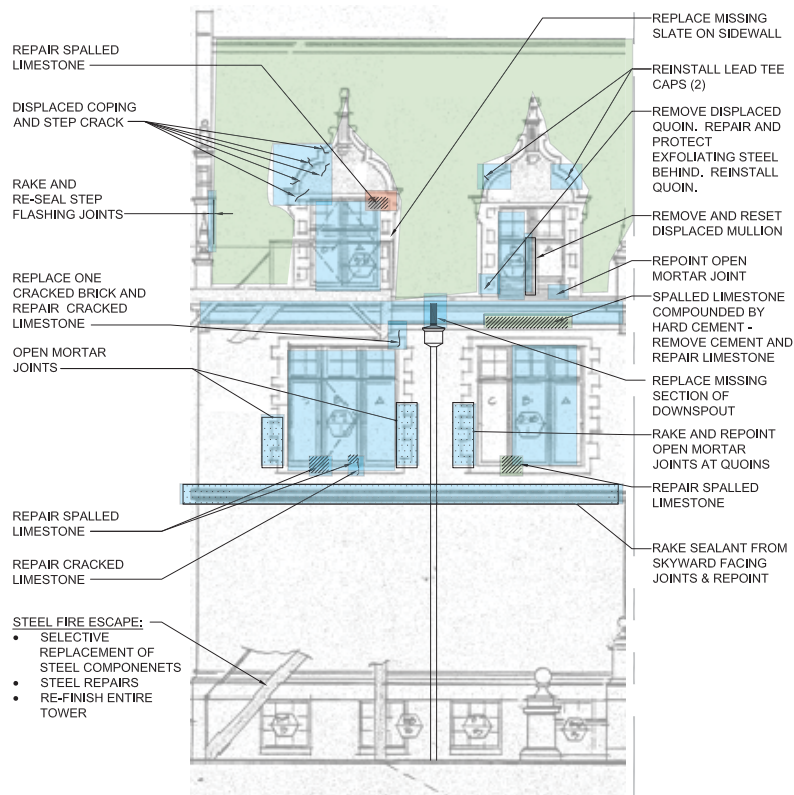
West Elevation



KEY PLAN

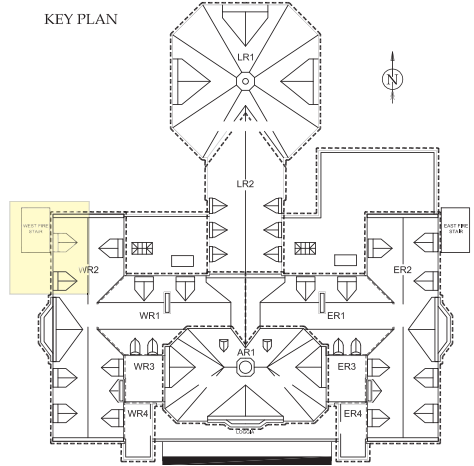
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5





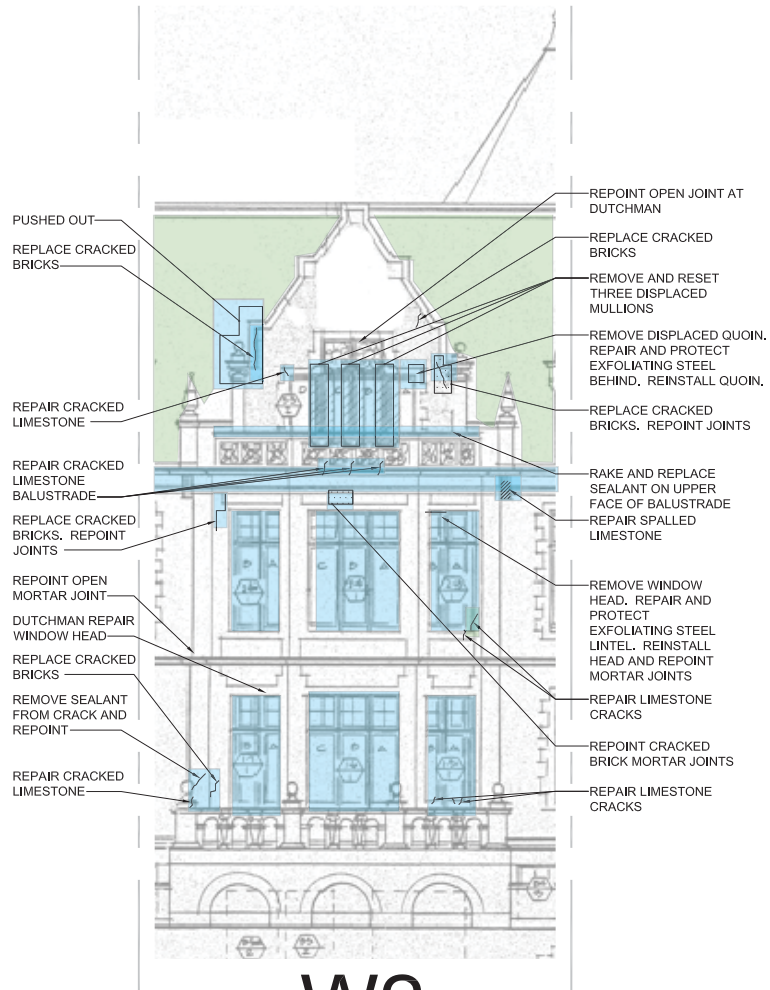
W1

KEY PLAN



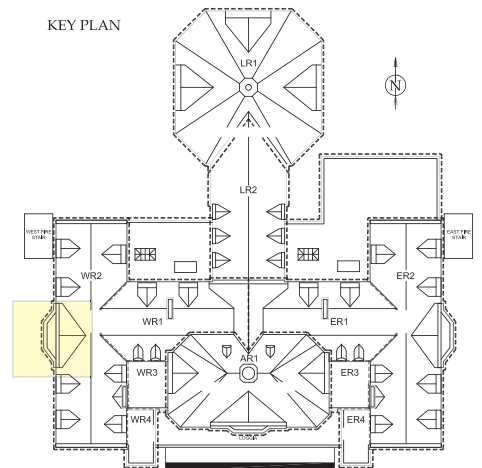
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5





W2

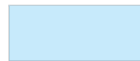
KEY PLAN



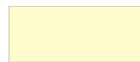
PHASE 1



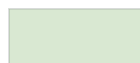
PHASE 2



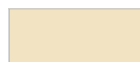
PHASE 3

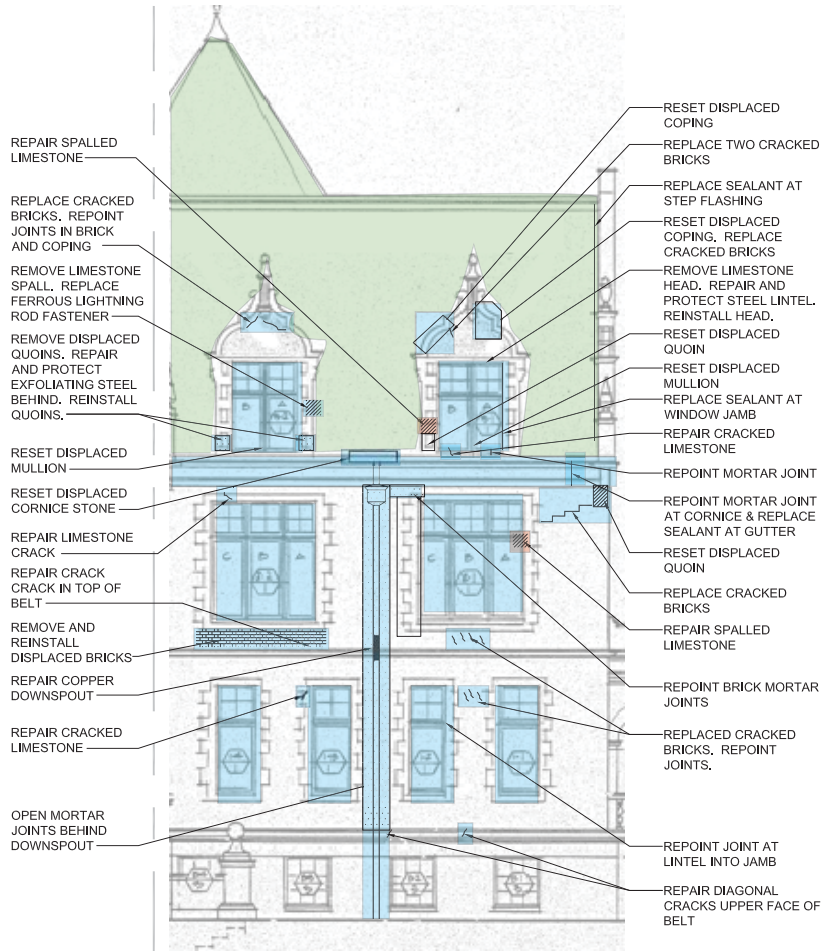


PHASE 4



PHASE 5





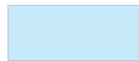
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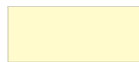
PHASE 1



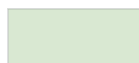
PHASE 2



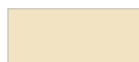
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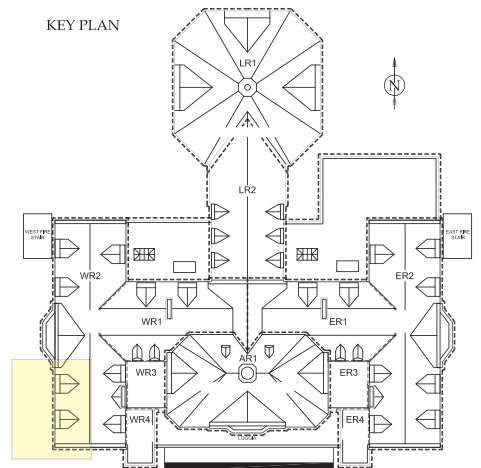
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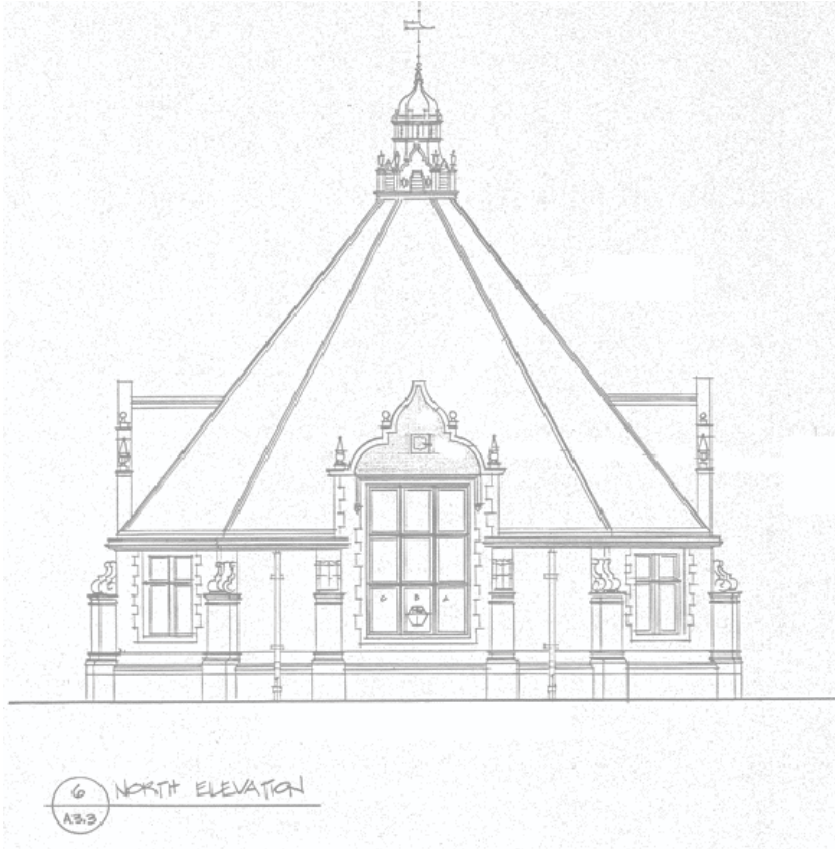
PHASE 5


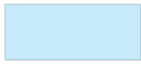

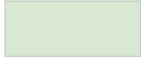
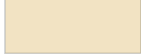


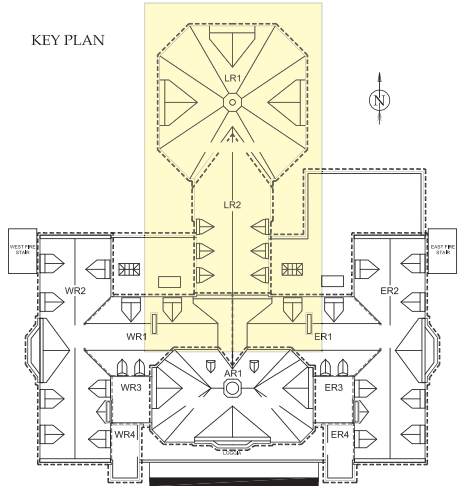
KEY PLAN



Library Wing



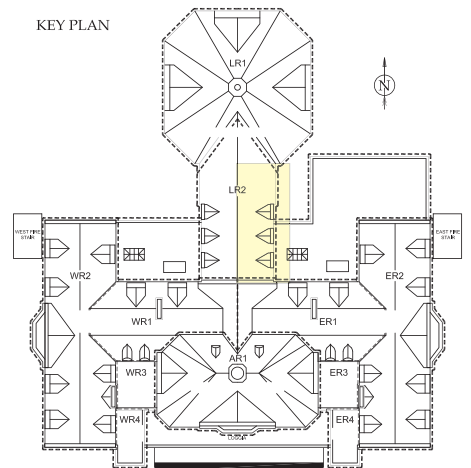
- PHASE 1 
- PHASE 2 
- PHASE 3 
- PHASE 4 
- PHASE 5 





L1

KEY PLAN



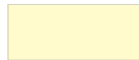
PHASE 1



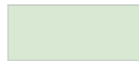
PHASE 2



PHASE 3

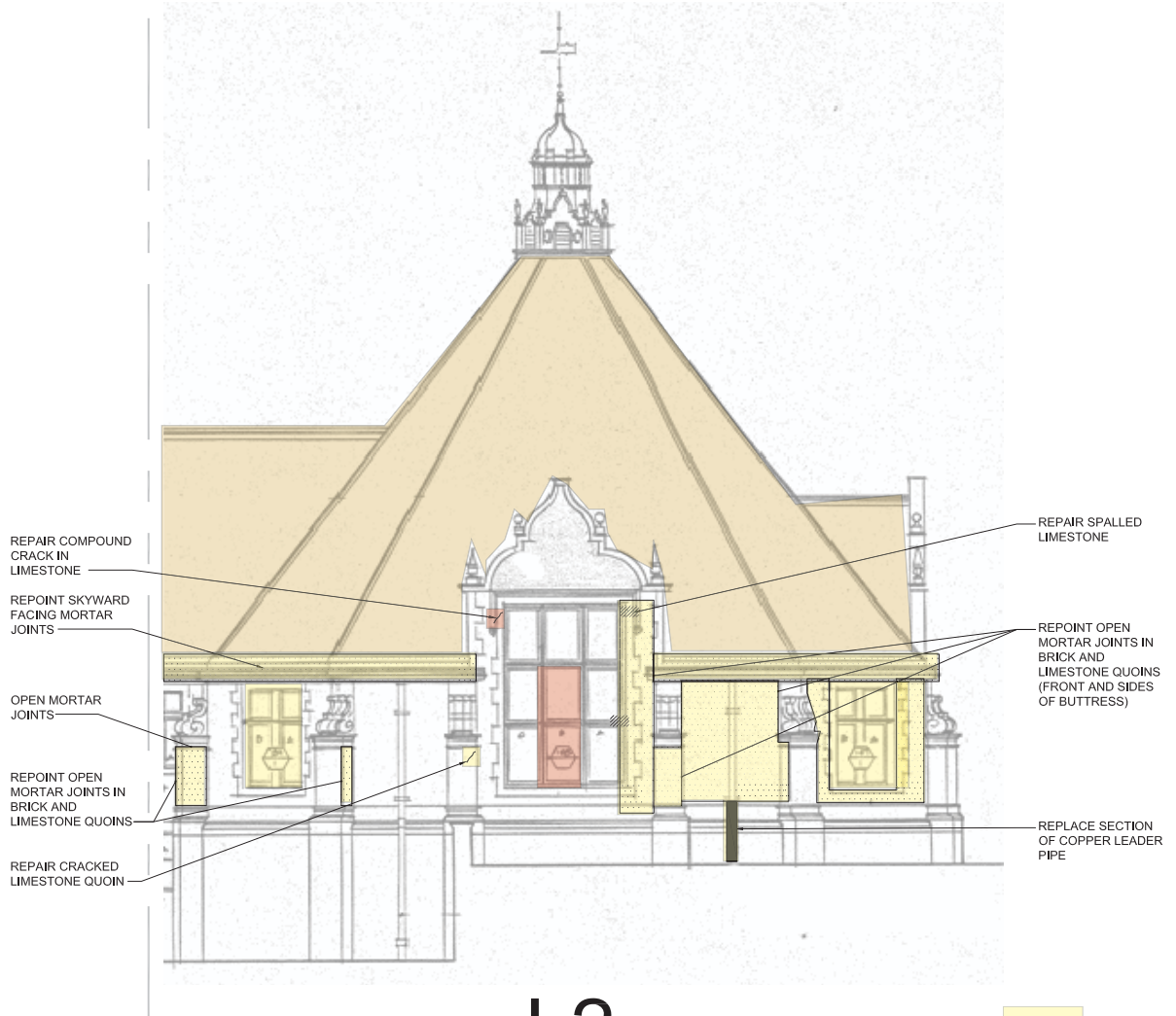


PHASE 4



PHASE 5





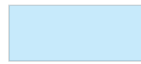
L2



PHASE 1



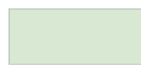
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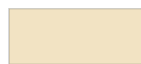
PHASE 3



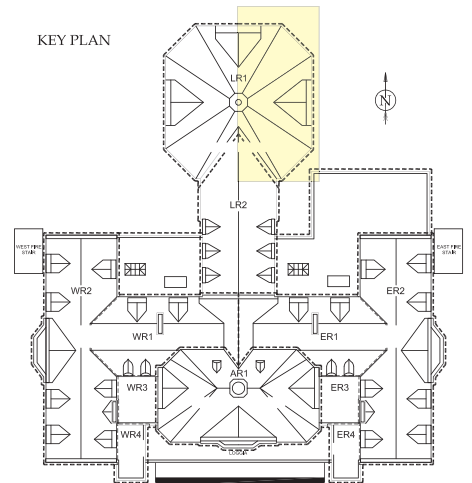
PHASE 4

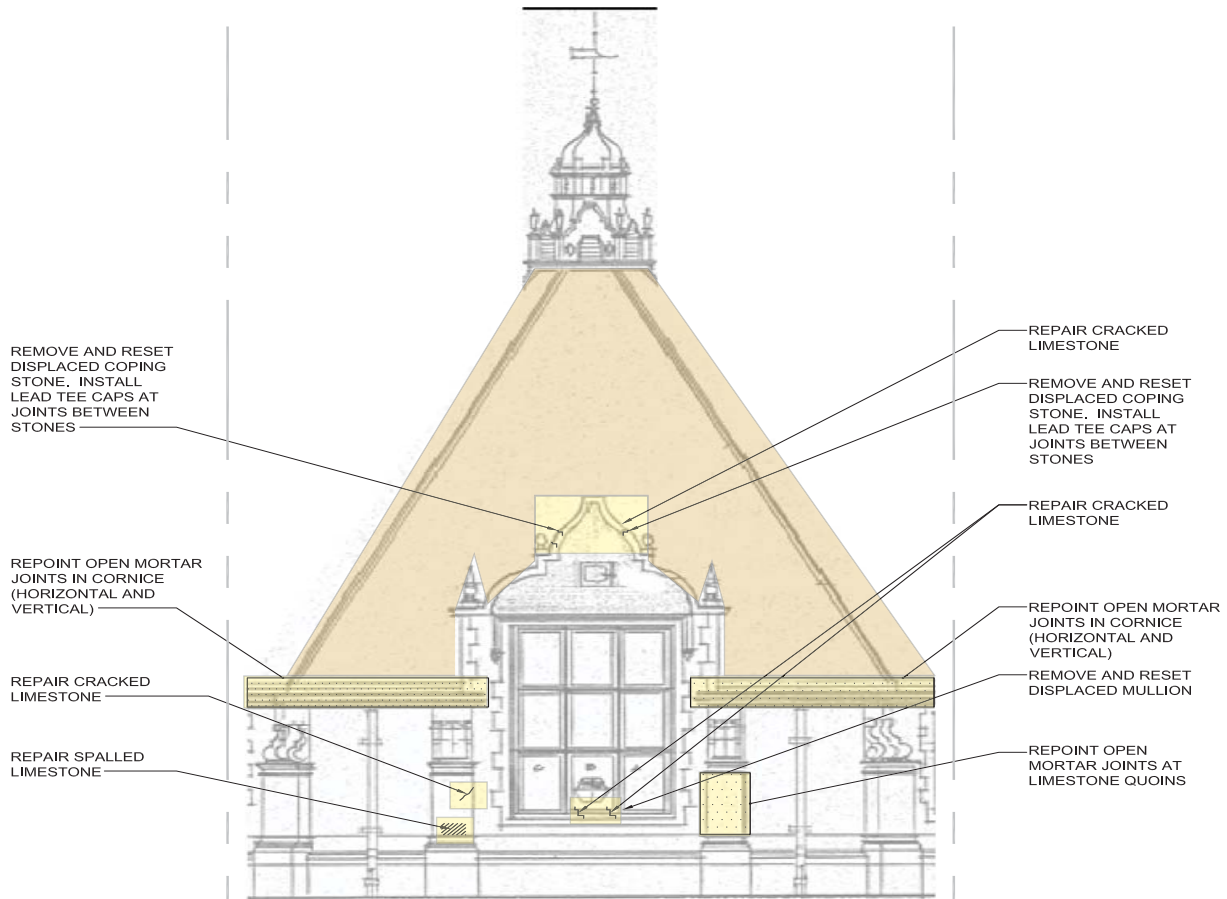


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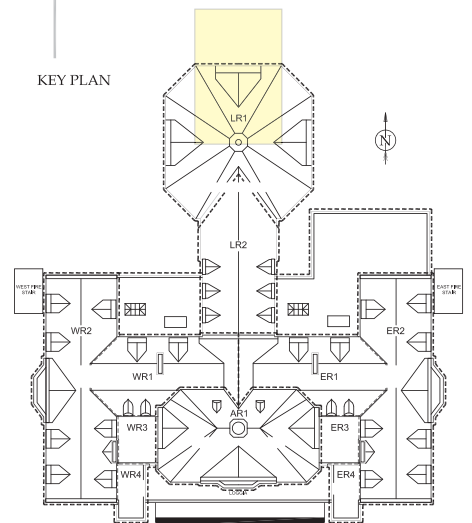
KEY PLAN





L3

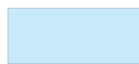
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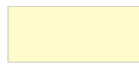
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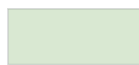
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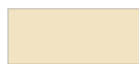
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PHASE 4



PHASE 5

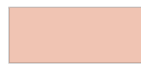




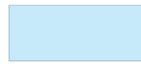
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PHASE 1



PHASE 2



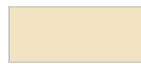
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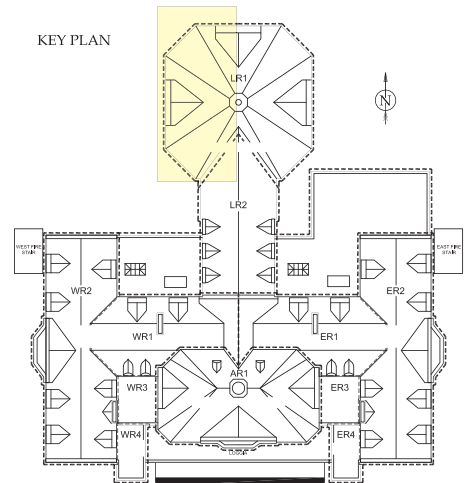
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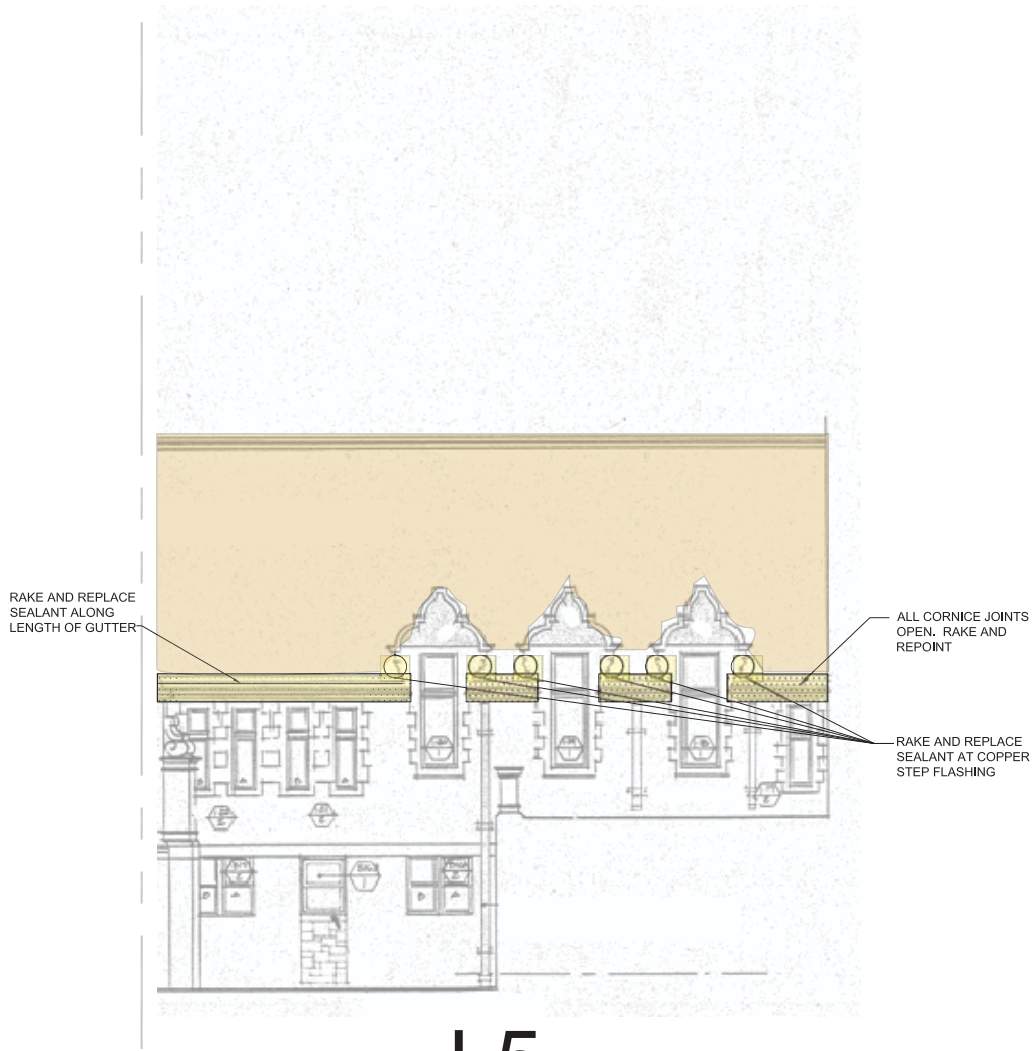


PHASE 5



KEY PLAN

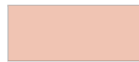




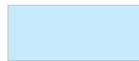
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PHASE 1



PHASE 2



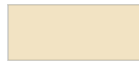
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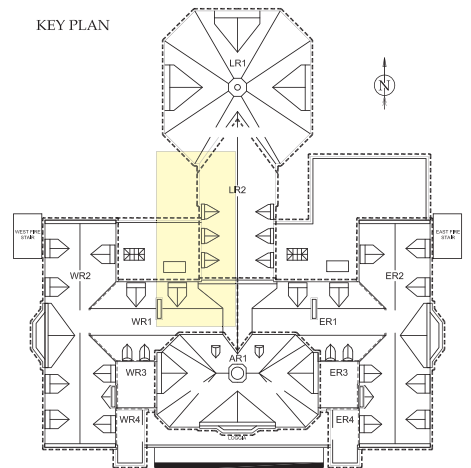
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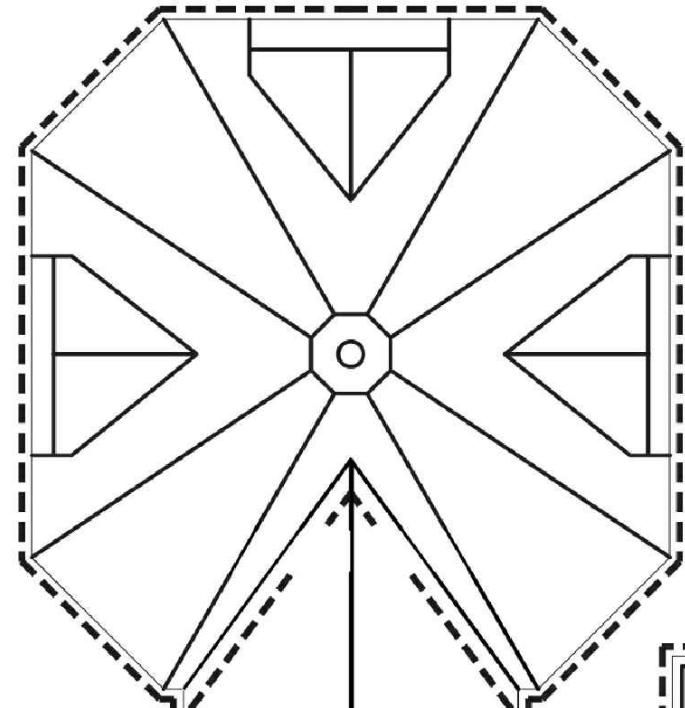


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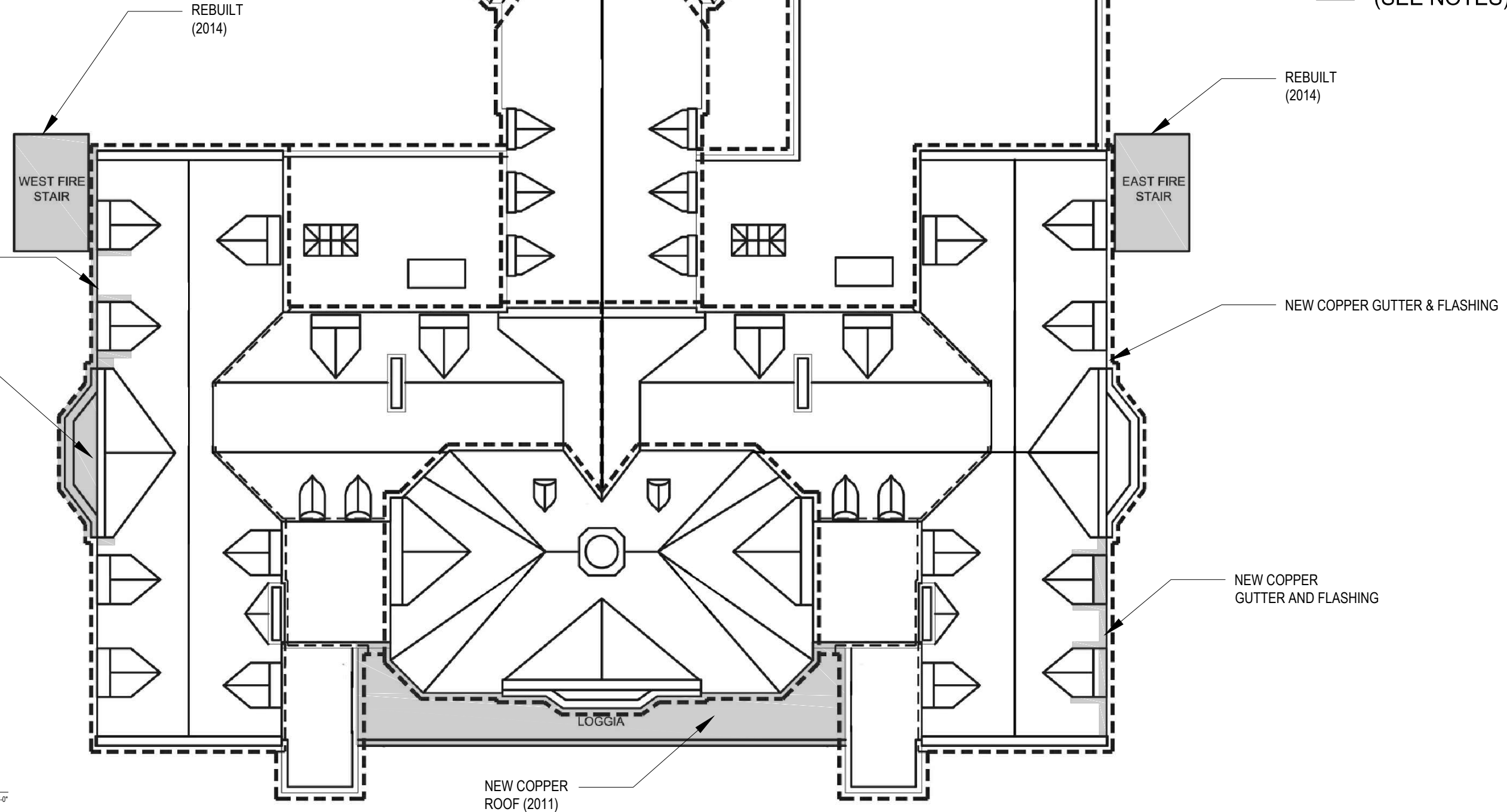
KEY PLAN





KEY:

-  WINDOW - EXTERIOR PAINTING (2016)
-  STAINED OR LEADED GLASS FULL RESTORATION (2011-2012)
-  OTHER WORK COMPLETED (SEE NOTES)



1 ROOF PLAN
1/8" = 1'-0"

Architect:
SPENCER & VOGT GROUP
architecture preservation

1 Thompson Square, Suite 504
Charlestown, MA 02129
617.227.2675
www.spencervogt.com

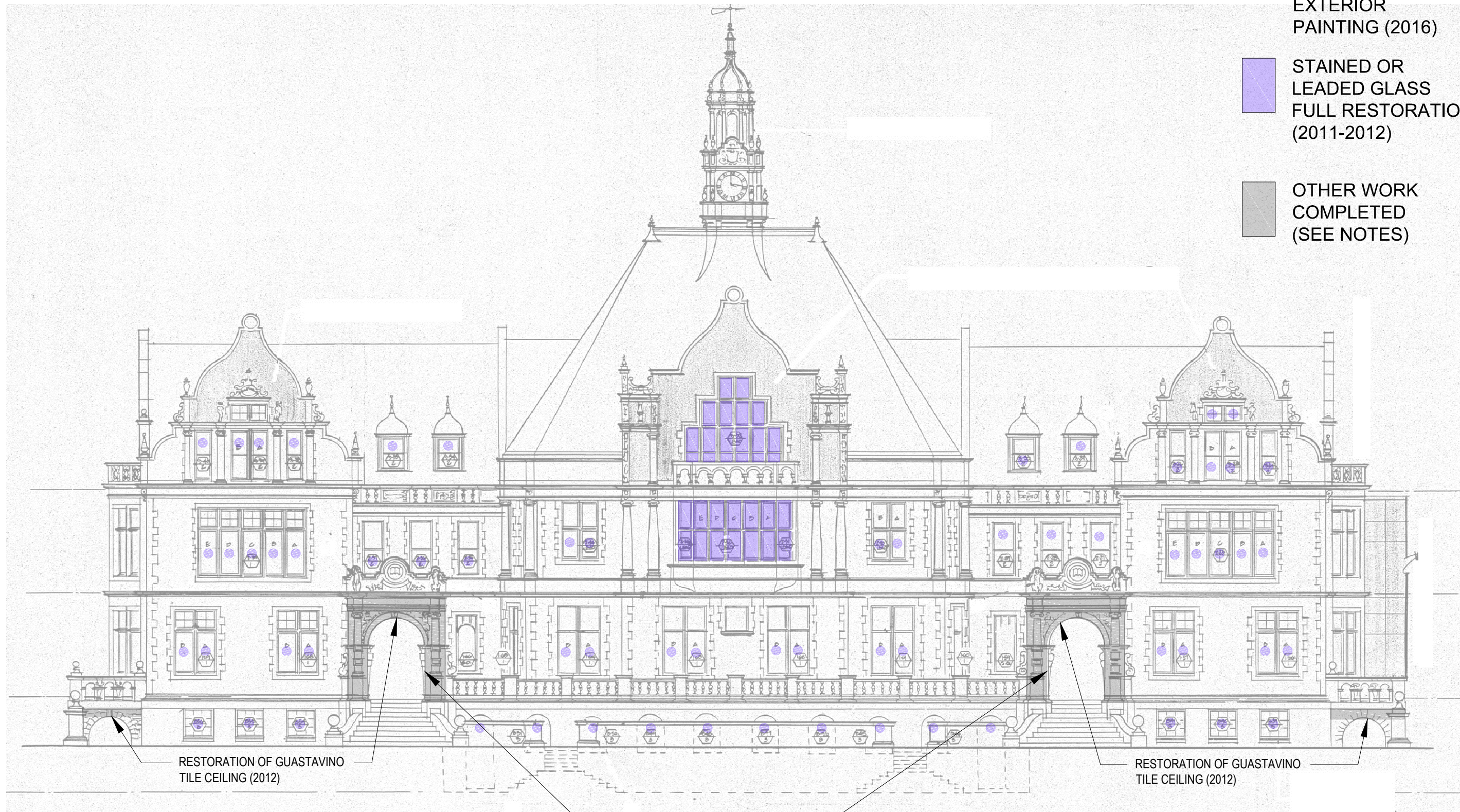
Seal:
Consultant:

ISSUE / REVISIONS:	Date:	Drawn by:	Checked by:	Project Number:
	11.14.16			1613.00

FAIRHAVEN HIGH SCHOOL
12 Huddleston Ave., Fair Haven, MA 02719

Work Completed - Plan

A100



KEY:

- WINDOW - EXTERIOR PAINTING (2016)
- STAINED OR LEADED GLASS FULL RESTORATION (2011-2012)
- OTHER WORK COMPLETED (SEE NOTES)

1 SOUTH ELEVATION

RESTORATION OF GUASTAVINO TILE CEILING (2012)

REPOINTING AT PORTICOS - EXTERIOR AND INTERIOR (2012)

RESTORATION OF GUASTAVINO TILE CEILING (2012)

Architect
SPENCER & VOGT GROUP
architecture preservation
 1 Thompson Square, Suite 504
 Charlestown, MA 02129
 617.227.2675
 www.spencervogt.com

Seal:

Consultant:

ISSUE / REVISIONS:

5.26.2016

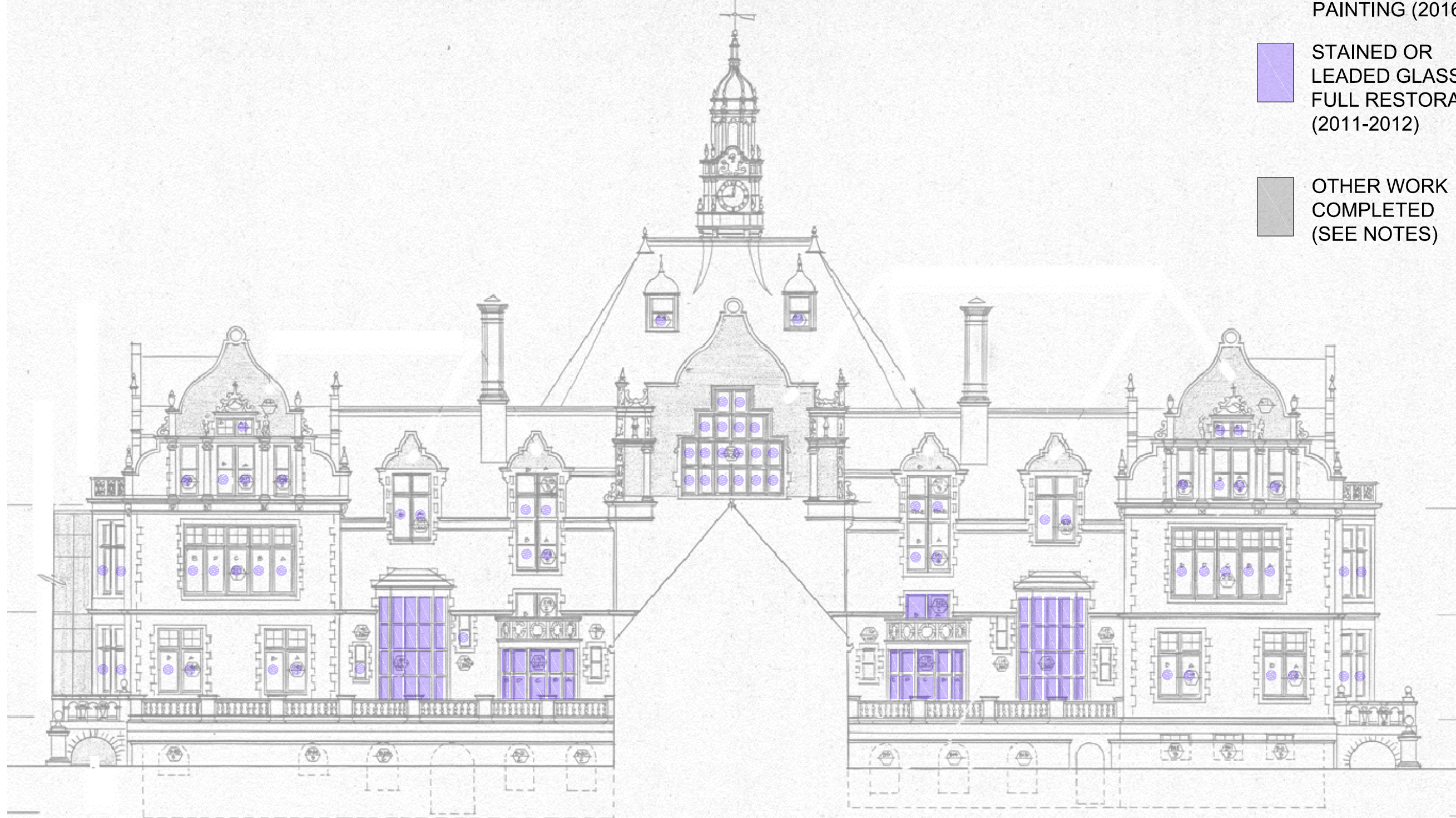
Date:
 Drawn by:
 Checked by:
 Project Number:

1613.00

FAIRHAVEN HIGH SCHOOL
 12 Huddleston Ave., Fair Haven, MA 02719

Work Completed - Elevations

A200



KEY:

- WINDOW - EXTERIOR PAINTING (2016)
- STAINED OR LEADED GLASS FULL RESTORATION (2011-2012)
- OTHER WORK COMPLETED (SEE NOTES)

1 NORTH ELEVATION

Seal:

Consultant:

ISSUE / REVISIONS:

11.14.16

Date:
Drawn by:
Checked by:
Project Number:

1613.00

FAIRHAVEN HIGH SCHOOL
 12 Huddleston Ave., Fair Haven, MA 02719

Work Completed - Elevations

A202

