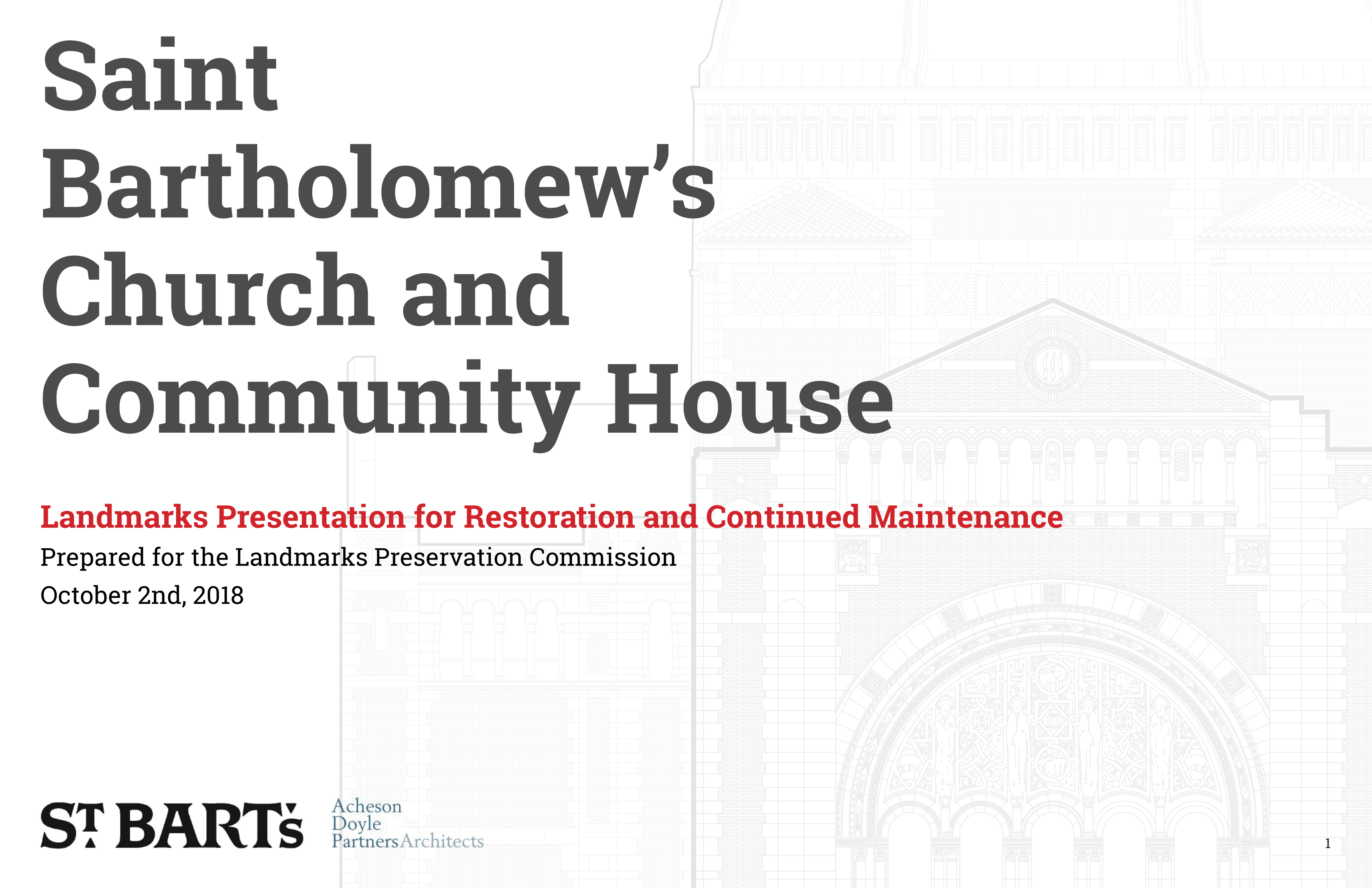


# Saint Bartholomew's Church and Community House



**Landmarks Presentation for Restoration and Continued Maintenance**

Prepared for the Landmarks Preservation Commission

October 2nd, 2018

**ST BART'S**

Acheson  
Doyle  
Partners Architects

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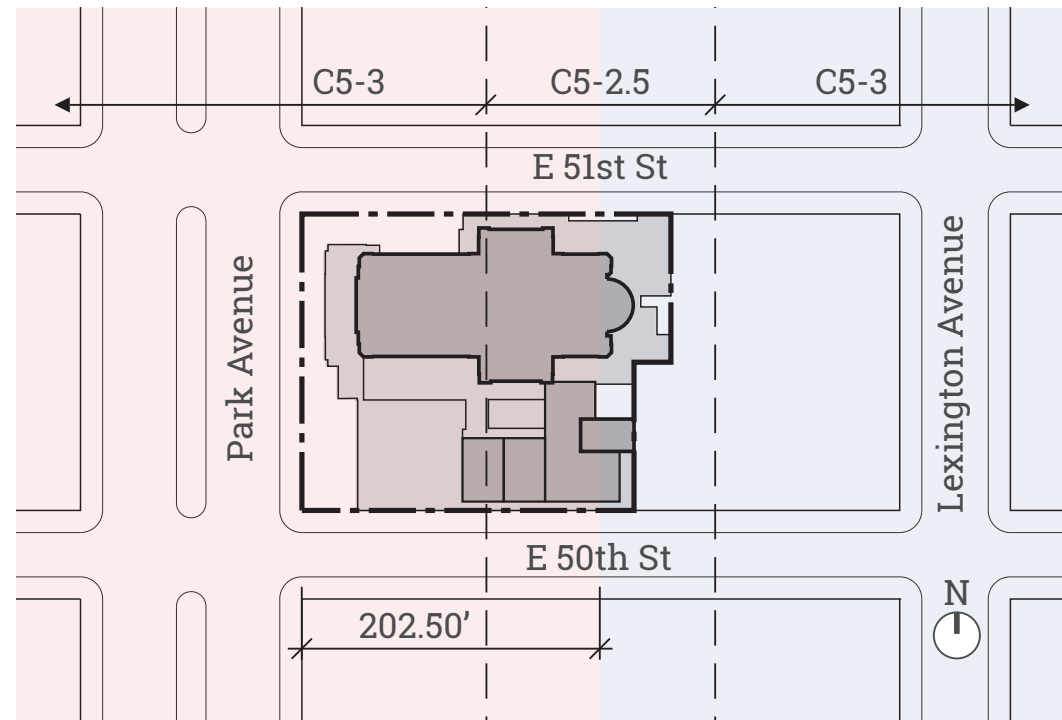
A detailed architectural line drawing of a building facade, rendered in light gray. The drawing shows a multi-story structure with various architectural features, including arched windows, a central gabled section with a cross, and a series of smaller arches at the base. The drawing is framed by a thick red border.

# 1.0 Introduction

# Introduction

As a requirement for LPC approval for the sale of air rights from Saint Bartholomew's church, this report outlines the following:

- Existing Conditions of the Church and Community House Exterior Facades, Interior Conditions, and Shared MEP Systems
- Agreement for Continuing Maintenance as required per ZR 81-642 for Future Development Air Rights Transfers



## Existing Building Info

**Address:**  
321 Park Avenue  
New York, NY 10022

**Block/Lot:**  
1305/1

**Zoning District:**  
C5-3, C5-2.5

**Special District:**  
Special Midtown District (MiD)

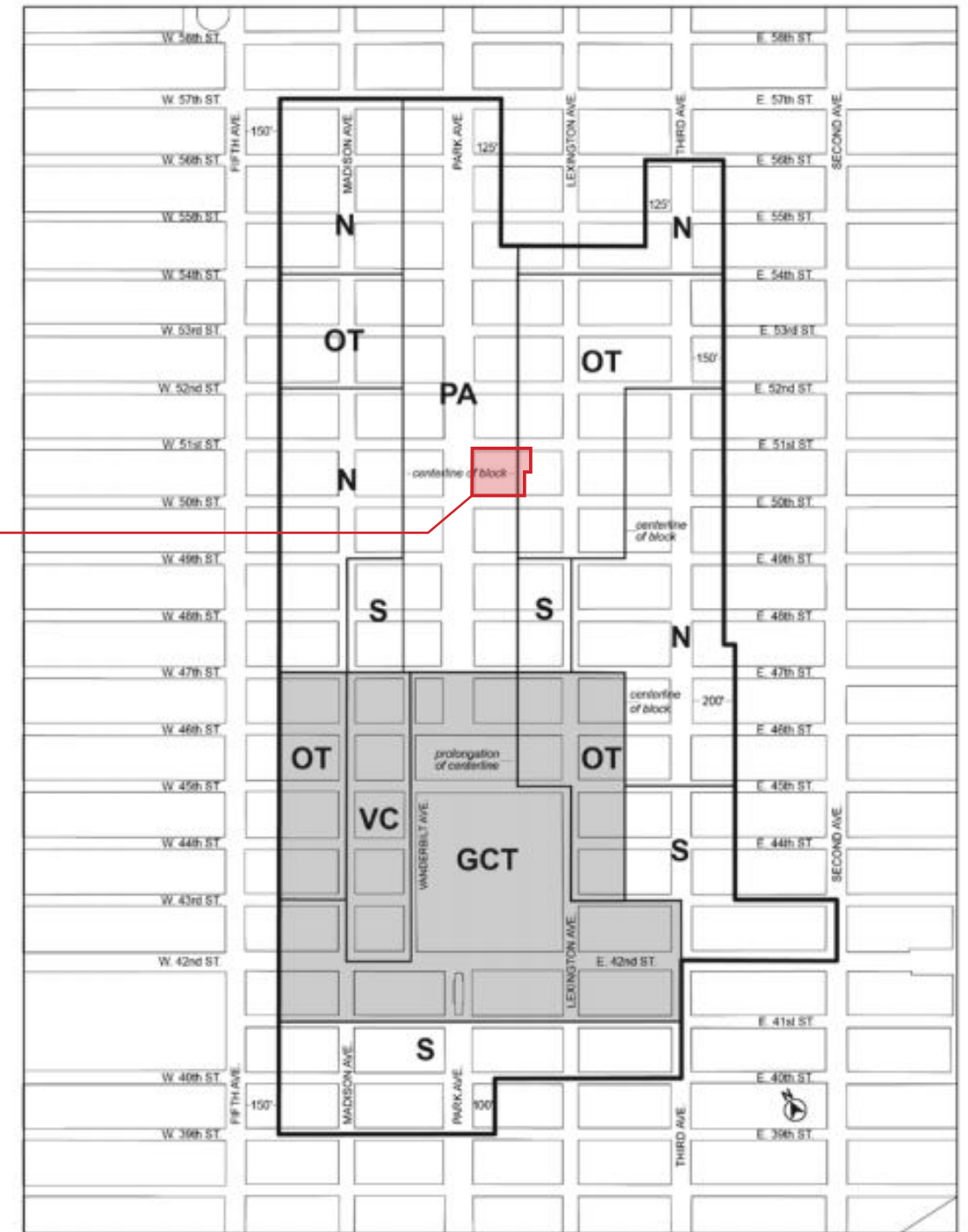
**Zoning Map:**  
 Park Avenue Subarea  
 Other Transit Improvement Zone

**Community Board:**  
Manhattan 05

**Use Group:**  
UG 4

**National Register of Historic Places:**  
#80002719

## Midtown East Subdistrict



SITE

\*All photos are via Acheson Doyle Partners Architects Unless Otherwise Noted

# History

“Imposing in mass, striking in appearance and in form, this impressive Church occupies a prominent Park Avenue site where it sits enthroned in all its splendor. One of the most striking features of St. Bartholomew’s is its polychromy produced by the attractive blending of salmon colored brick with greyish limestone, marble, and tiles of various hues. The inspiration for the dome is undoubtedly Byzantine and derives more particularly from adaptations of the Byzantine style in Venice.

St. Bartholomew’s Church is built on a Latin cross plan and owes its basic architectural characteristics to Byzantine models. A high arched central portal is framed by two lower arched side doors. A frieze of low relief sculpture, resting on slender columns, unifies these three openings. The bronze doors, whose panels depict Old and New Testament themes, are considered by many critics to be the finest of their kind in the City. The clerestory walls of the nave rise high above the comparatively narrow side aisles and are pierced for almost their entire length by large, round-arched windows. A beautiful rose window, with intricate tracery, lights the south wall of the shallow transept. Over the crossing, atop a high drum, sits the octagonal dome sheathed with tiles and marbles in highly colored and intricate designs. When this handsome dome glitters in the sun, its brilliance offers a glowing contrast to its surroundings.

St. Bartholomew’s Church was organized in 1835. Its first site was at Lafayette Place and Great Jones Street. In 1872 they moved to their second home at Madison Avenue and 44th Street, where they remained until the erection of the present edifice, in 1918. The congregation includes some of the City’s most prominent families.

The construction of St. Bartholomew’s was begun in 1917 according to the plans of Bertram G. Goodhue. Goodhue incorporated in his new building the beautiful Romanesque porch then part of the church at Madison Avenue and 44th Street. This porch, designed by McKim, Mead & White, was given by his family as a memorial to Cornelius Vanderbilt II. Its model was the much admired portico of the Church of St. Gilles du Gard at Arles, in southern France, one of the earliest Romanesque examples of the grouping of three doorways into a single composition. Royal Cortissoz, the famous art critic, has called the portal of St. Bartholomew’s Church one of the most noble works of its kind in modern times.

In 1926, Mayers, Murray & Phillip, associates of B. G. Goodhue, drew the plans for the adjoining terraced Community House which was completed in 1928. Although the style of this building is well suited to its functional requirements, it harmonizes with the Church through the use of the same warm-colored building materials, the continuation of the limestone band courses from the Church and chapel and the interspersing of decorative details similar in character and scale to those used in construction of the main house of worship. These same architects put up the present dome in 1930 when the Church was completed.”<sup>1</sup>

<sup>1</sup>Landmarks Preservation Commission St. Bartholomew’s Church and Community House Designation Report [LP-0275], New York, City of New York 1967.



**North West Corner**  
ca. 1919



**Lower Terrace (Community House)**  
ca. 1929

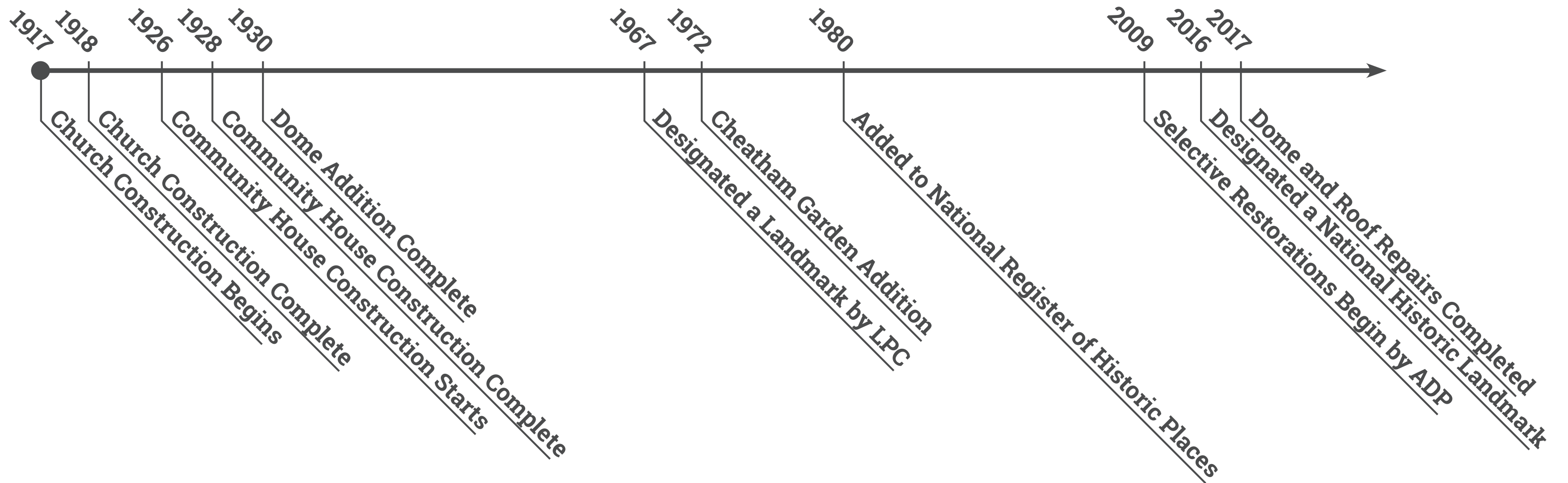


**South West Corner**  
ca. 1975



**Interior (Church)**  
ca. 1916-1960

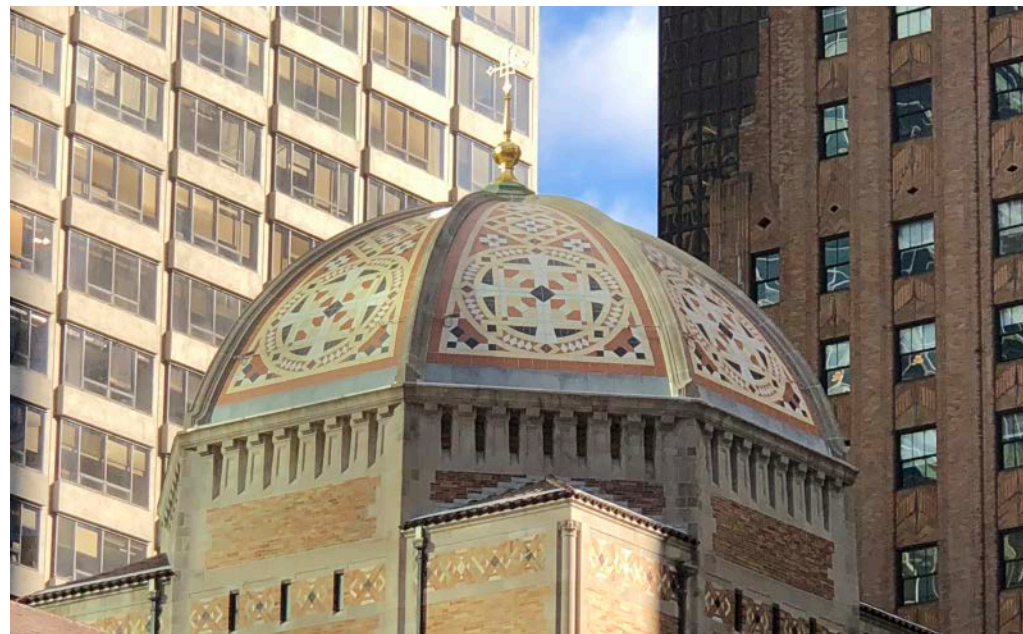
# History



**South West Corner**

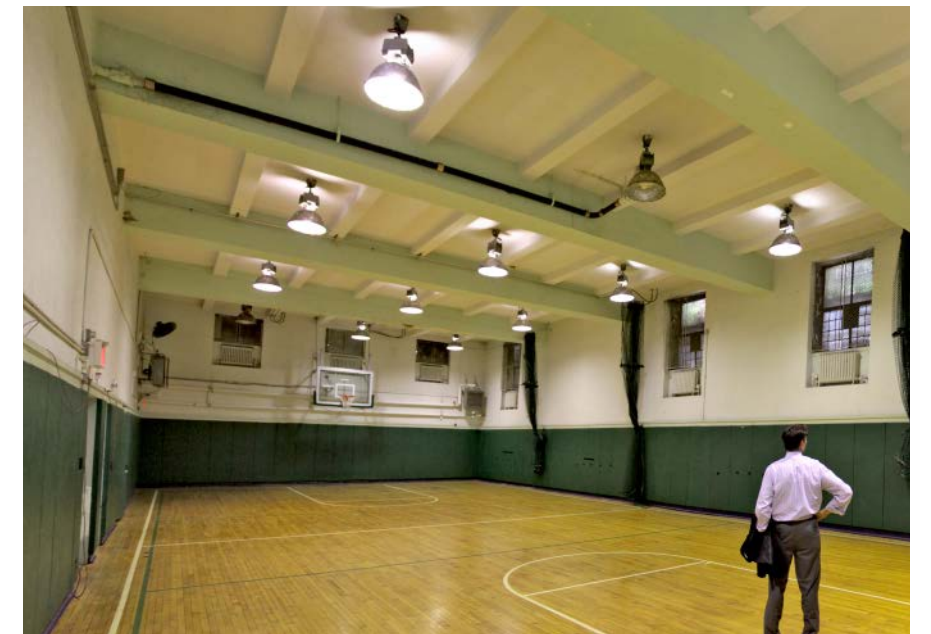
ca. 2009

1.1 History



**Dome Renovation**

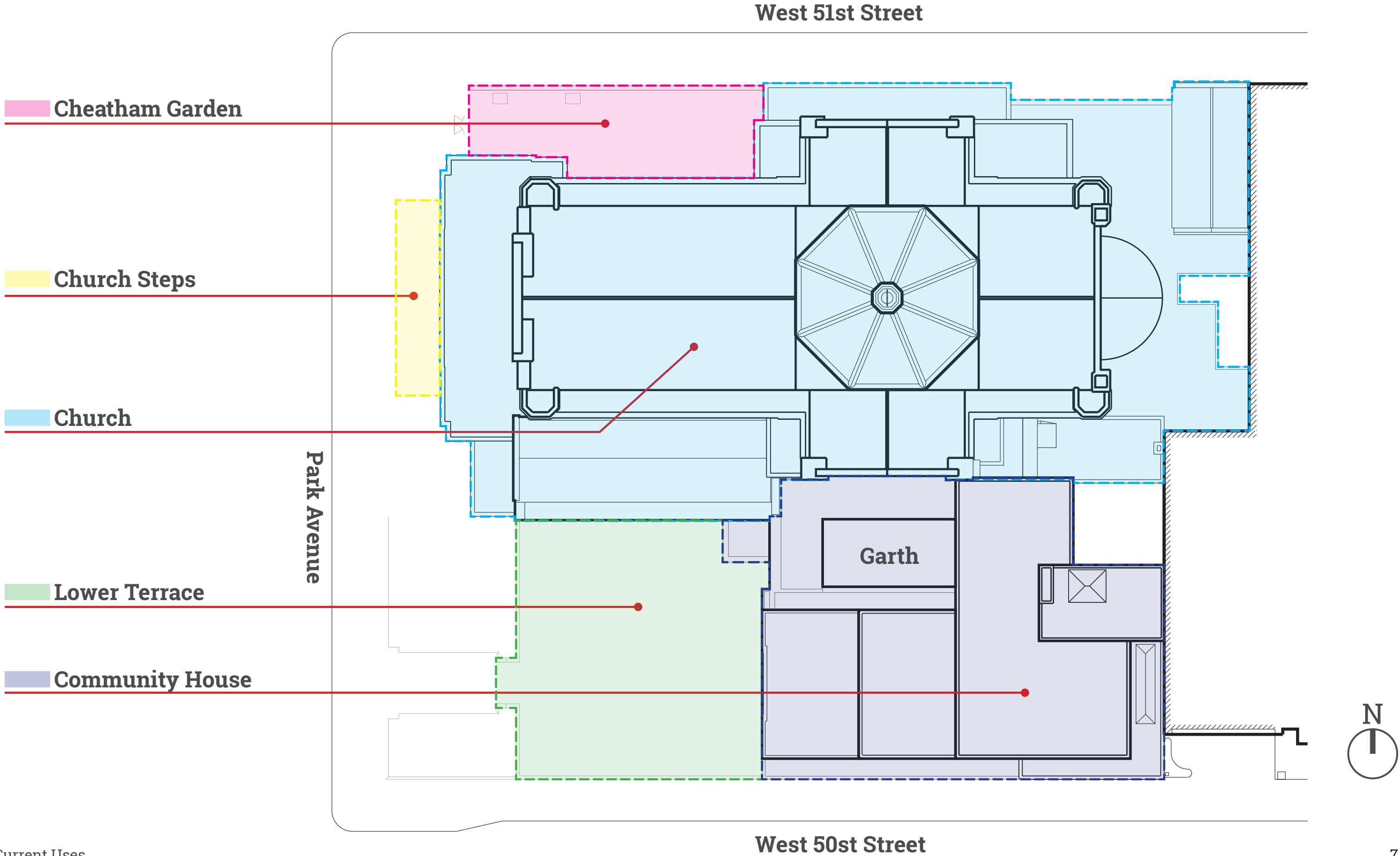
ca. 2017



**Gymnasium**

ca. 2009

# Current Uses



# Current Uses



Today, Saint Bartholomew's Church accommodates multiple functions and ministries. At its core, the Church hosts Sunday and Weekday worship (figure 1-1), sermons, and community events like baptisms, marriages, and funeral/memorial services. The Community House also provides a wide range of functions. A swimming pool and basketball court are in the cellar (figure 1-2). The third floor offers a private event space and adjacent terrace (figure 1-3), which are used for church functions and private events. Finally, the fourth and fifth floors, are occupied by a preschool (figure 1-4) with a rooftop playground.



# Methodology of Assessment

- **Extensive Tactile and Visual Assessment**
- **Knowledge Gathered from Years of Restoration Work on the Church**
- **Expanding on Previous Condition Assessment Reports**
- **In-depth Consultation with Church Facilities Maintenance Personnel**

This report was undertaken by Acheson Doyle Partners Architects in the months of April and May of 2018. The buildings and examined were the main church building, the community house, the shared roofs, and the Stanford White Triple Portal. This report aims to identify and assess the various exterior components of the above-mentioned buildings. The approach was to identify and assess each of the various building materials and components both individually and as they relate to one another. Where possible, general recommendations for repair and maintenance are suggested. Where appropriate, recommendations for further testing and assessment are indicated to support a more in-depth analysis that would be required to make the appropriate recommendations for remediation and contract documents for repairs.

The findings of this survey and assessment are based on visual inspections and tactile observations that were performed up-close, where access from ground level and such vantage points at roof set-backs permitted. Where necessary, spotter scopes with telephoto lens were employed for areas and conditions that were too distant and less accessible given height and access restrictions.

Included in the body of this survey is the assessment of the conditions and serviceability of the various materials, systems and their components and the general make-up of the historic fabric of the buildings. Observation and evaluation of any structural conditions were not performed and are beyond the scope of this report. The findings and recommendation of this survey are not intended to serve as a final evaluation of soundness or safety, and it does not include any evaluations of structural conditions. This is particularly true of the structural integrity of the terra-cotta structural floors and roof slabs, apart from the dome, which was accessed and underwent a restoration completed in 2017. However, this survey does serve as a good starting point for such a structural survey and assessment to proceed from.

All observed elements and conditions are described in the text, identified on the drawings, and where necessary, are further illustrated with annotated photographs. Recommendations for remediation, repairs and follow-up testing or recommendations for more in-depth investigation are included. Where more in-depth investigation such as material testing or destructive probes are recommended, the information resulting would be used to determine the precise protocol that would be included in subsequent construction drawings and specifications for future bidding.

**Dome Restoration**  
(Top Right, Bottom Right) ca. 2017





## **2.0 Continued Maintenance**

# Continued Maintenance

## Agreement

- **Capital Allocation:**

- Sales Until Buildings are Considered to be in Sound Condition**

- 10% to Diocese of New York

- 75% for Restoration of Church/Landmark Account

- 15% for St. Barts Discretionary

- \$11.25M** From Current Sale for Restoration

- Sales After Buildings are Considered to be in Sound Condition**

- 10% to Diocese of New York

- 5% for Landmarks Account

- 85% for St. Barts Discretionary

- **Inspection Obligation: Periodic Inspections Every 7 Years**

# Continued Maintenance

**Work Priority**

- Continued Maintenance Proposed in Three Priority System**

<b>Priority One</b>	a) Community House Exterior Facades	\$5.3M	-	\$7.4M
	b) Remaining Shared Roofs	\$4.4M	-	\$5.6M
	<b>Sub-total</b>	<b>\$9.7M</b>	-	<b>\$13.0M</b>
<b>Priority Two</b>	a) Church Exterior Facades	\$7.6M	-	\$10.7M
	b) Park Avenue Steps & Sidewalks	\$1.9M	-	\$2.9M
	<b>Sub-total</b>	<b>\$9.5M</b>	-	<b>\$13.6M</b>
<b>Priority Three</b>	a) Stanford White Triple Portal	\$3.1M	-	\$3.7M
	b) Interior Building Systems (MEP)	\$4.4M	-	\$5.3M
	c) Site Elements	\$3.3M	-	\$4.4M
	<b>Sub-total</b>	<b>\$10.8M</b>	-	<b>\$13.4M</b>
<b>Grand Total</b>		<b>\$30.0M</b>	-	<b>\$40.0M</b>

A detailed architectural line drawing of a Gothic cathedral facade, rendered in light gray. The drawing shows a large central rose window with intricate tracery, flanked by two tall, narrow windows with pointed arches. Below these are several smaller arches and doorways, some with decorative carvings. The entire drawing is set against a white background and framed by a thick red border.

# **3.0 Exterior Observations and Assessments**

# Shared Roof Conditions

## Exterior Details

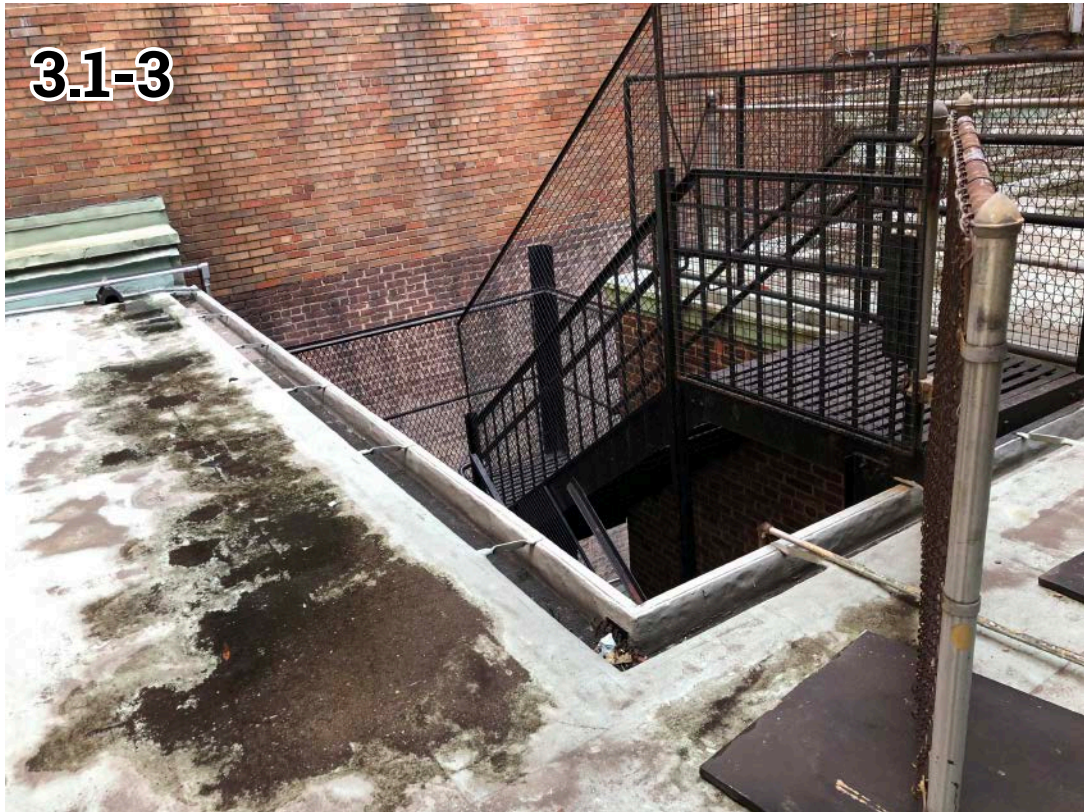


### 3.1-1 Lower Flat Church Roof

- Blocked Scupper
- New Kemper Roof Completed in 2013
- Ponding Water
- Insufficient Sloping

### 3.1-2 Lower Flat Church Roof

- Raised Flashing



### 3.1-3 Lower Flat Church Roof

- Missing Parapet / Railing

### 3.1-4 Leaking Chapel Terra-cotta Roof

- Deteriorating lower Terra-cotta Roof

# Church Exterior Facades

## Exterior Details



### 3.2-1 Church Brick, Fair Condition

The brick masonry is unique in that it includes brick in several sizes rather than a standard dimensioned brick unit. The church building exterior is a rich collection of mottled brick colors, sizes, and brick patterns.

### 3.2-2 Heavily Deteriorated Brick

- Popping Face-brick, Typical Throughout



### 3.2-3 Heavily Deteriorated Mortar, Gallery Walk

- Internal Masonry Water Infiltration
- Mortar Joint Failure

### 3.2-4 Heavily Deteriorated Mortar

- Mortar Joint Repointing Required

# Church Exterior Facades

## Exterior Details



### 3.2-5 Church Facade

- Carbon Deposits and Dirt Accumulation

### 3.2-6 Cracked Limestone Wall

- Limestone Block Chipping and Spalling.
- Selective Repairs to be Considered
- General Masonry Cleaning Recommended



### 3.2-7 Standard Vision Glass Window

- Throughout the building's less prominent street facades are standard metal windows with lead mullions and standard vision glass.

### 3.2-8 Standard Window Frame

- Broken or Missing Glass, Throughout
- Rusting Frames
- Water Infiltration
- Improper Opening/Closing Function

# Church Exterior Facades

## Exterior Details



### 3.2-9 Gallery Colonnade

- Carbon Deposits
- Biological Growth

### 3.2-10 Colonnade Column

- Moisture Accumulation
- Deposits on Column Capitals
- Deteriorating Marble Column



### 3.2-11 Nave Stained Glass Windows

- Missing or Damaged Bird Netting



### 3.2-12 Clerestory Window

- Unprotected Stained Glass Window
- Minor Glazing and Mullion Deterioration
- Dirt and Debris Accumulation
- Lack of Bird Net

# Church Exterior Facades

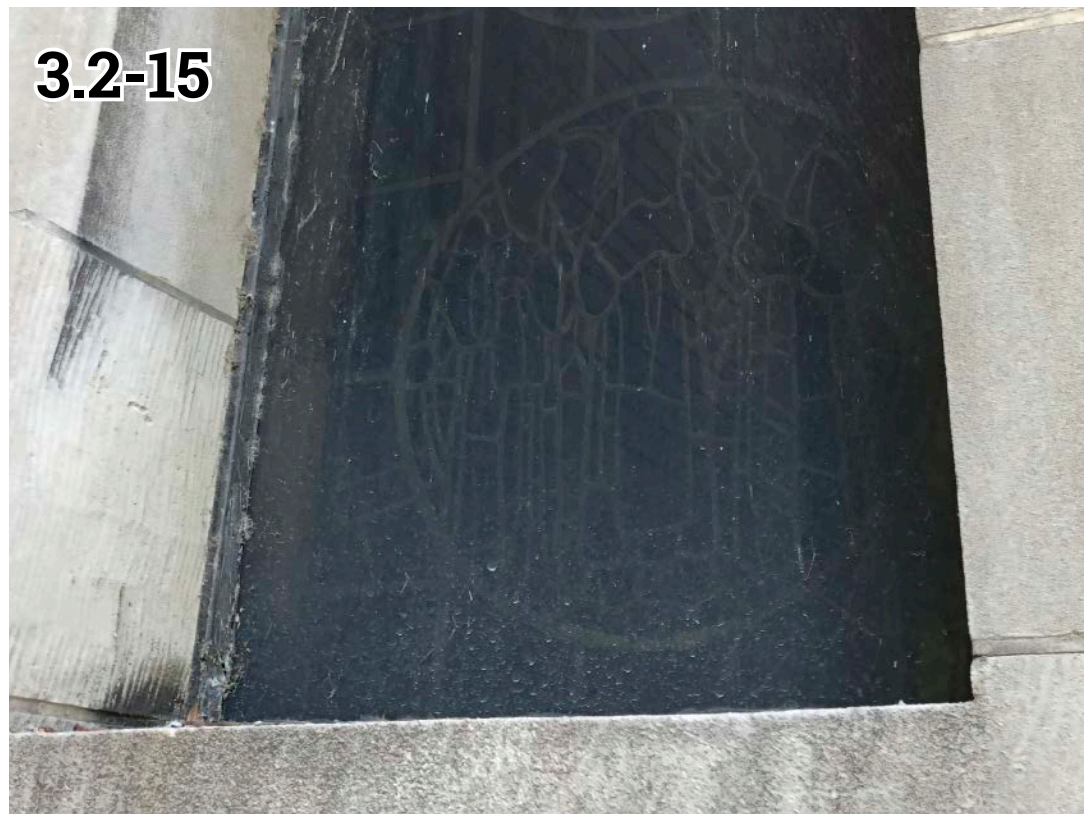
## Exterior Details



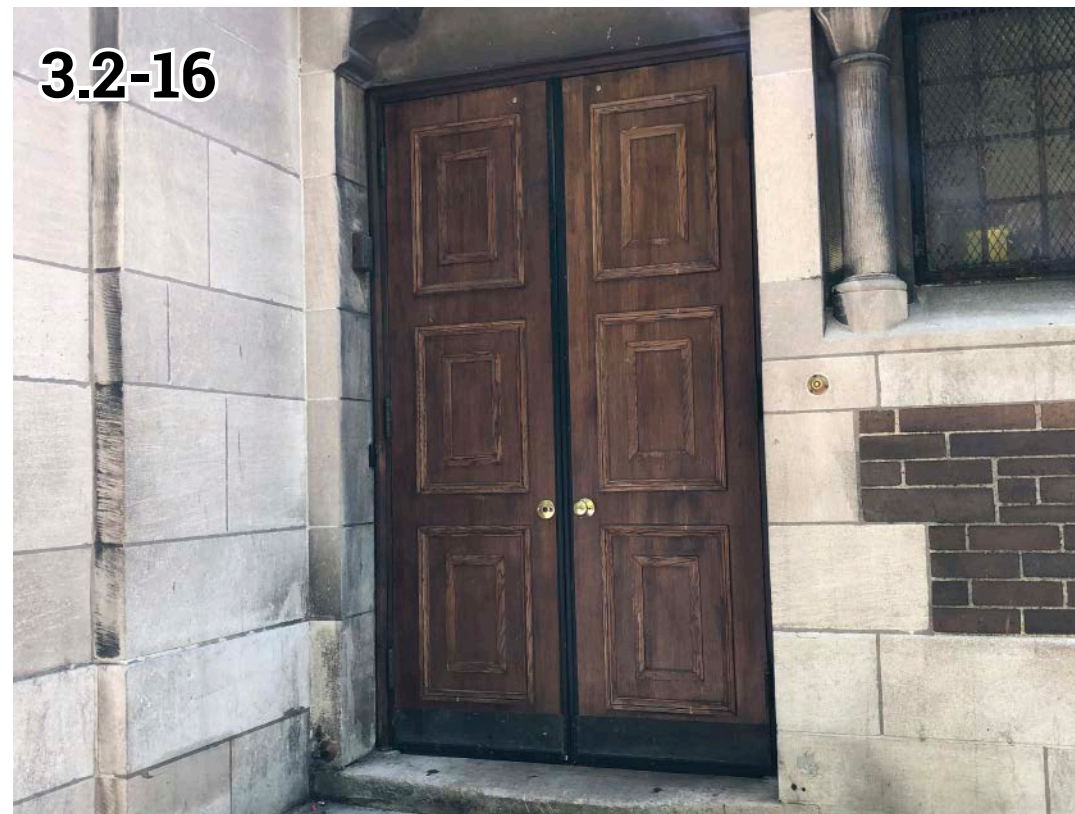
3.2-13



3.2-14



3.2-15



3.2-16

### 3.2-13 Rose Window

- Unprotected Stained Glass Window
- Minor Glazing and Mullion Deterioration
- Dirt and Debris Accumulation
- Damaged Stone Column
- Lack of Bird Deterrent Netting

### 3.2-14 Stained Glass Window

Overall, the quality of the stained glass is in acceptable condition except for normal dirt and debris accumulation. The four main stained-glass windows were done by the famous female artist Hildreth Meiere with the rest by others.

### 3.2-15 Stained Glass Windows

- Deteriorating Glazing and Mullions
- Dirt Accumulation
- Poor Light Transmission

### 3.2-16 51st Street Entrance

- Deteriorating Exterior Doors
- Lack of Accessibility

# Church Exterior Facades

## Exterior Details



### 3.2-17 North Entrance Wood Doors

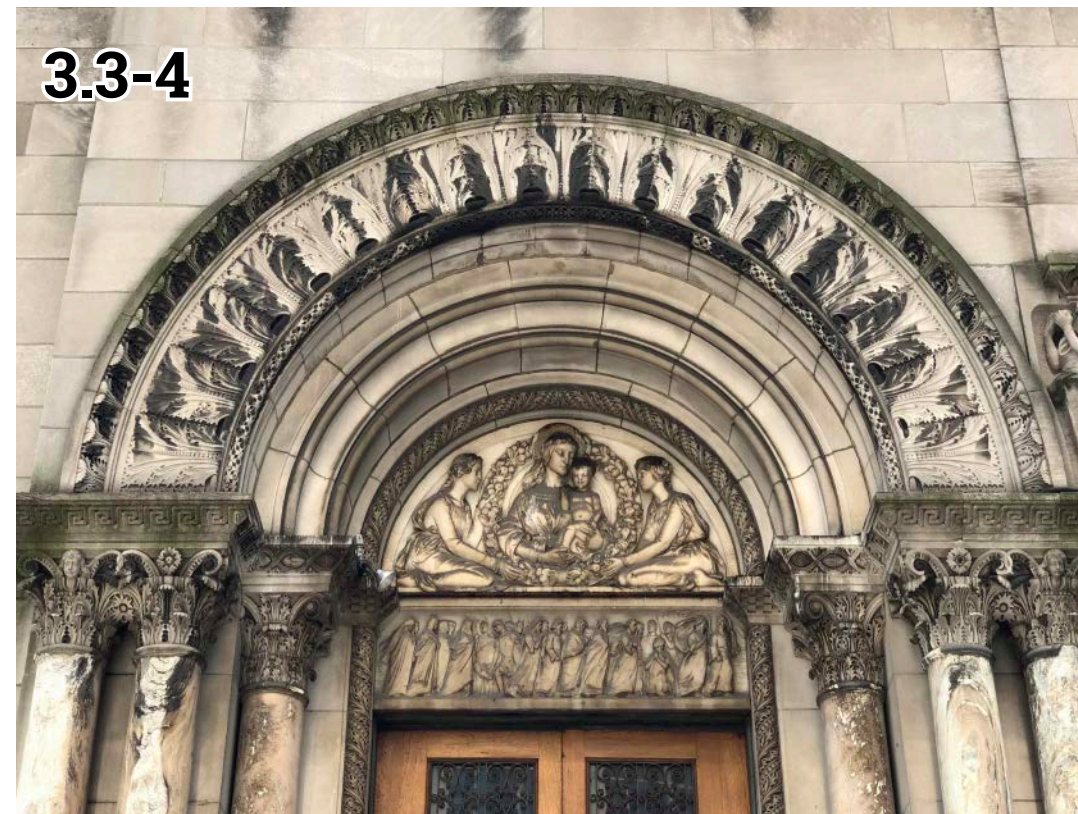
- Severe deterioration to both the natural wood and metal frame.
- Pocket operation no longer functions, and the movable frame is fixed in place.

### 3.2-18 Central Entrance Bronze Door

- Deterioration and Surface Staining

# Stanford White Triple Portal

## Detail Images



### 3.3-1 Columns

- Deteriorating Marble Columns

### 3.3-2 Capitals

- Carbon Deposits
- Eroding Details

### 3.3-3 Frieze

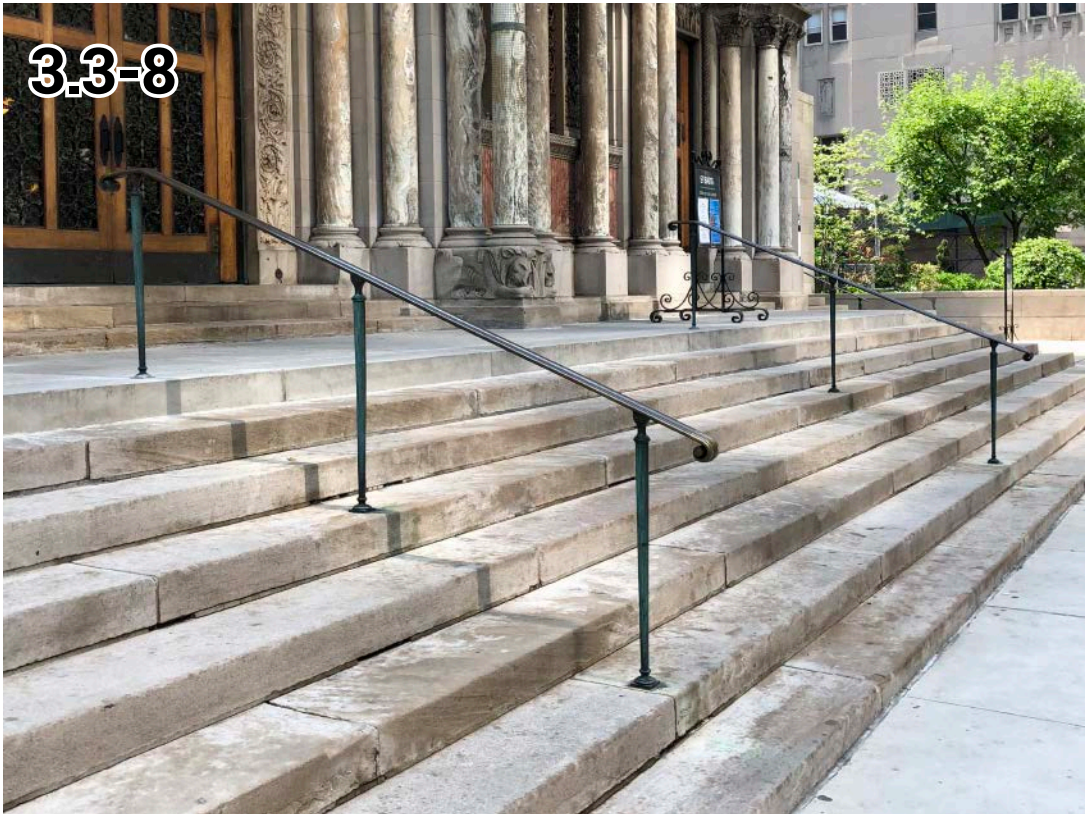
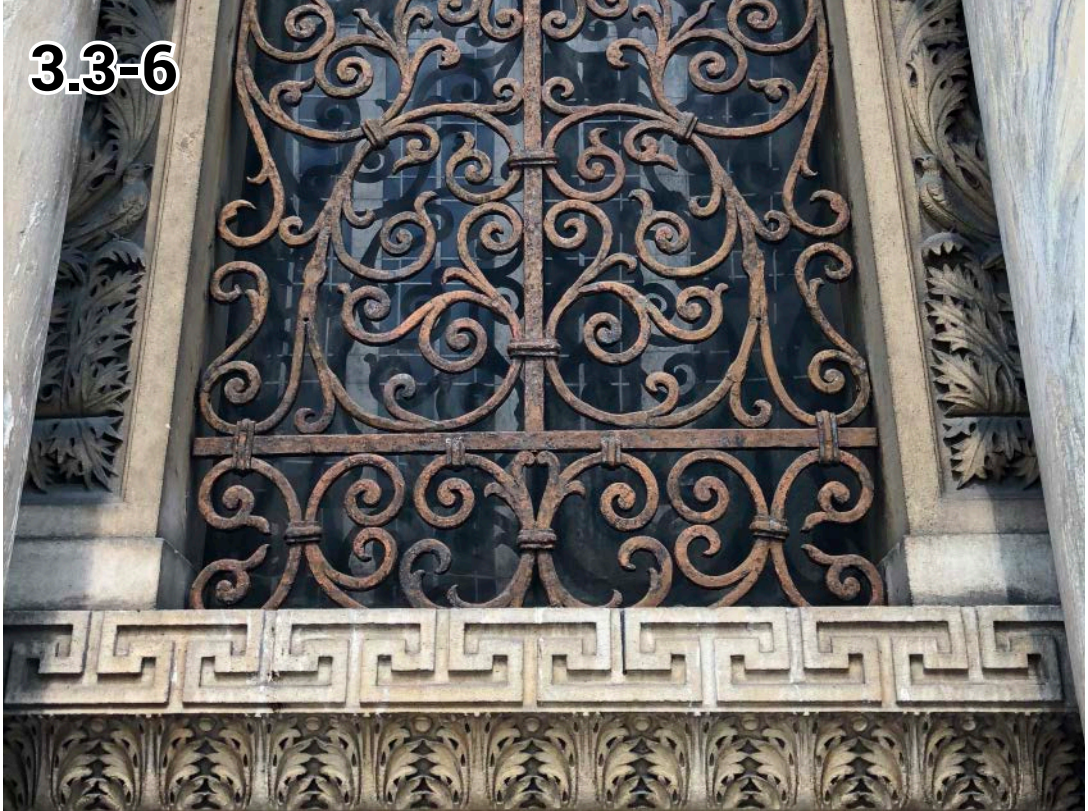
- Carbon Deposits
- Eroding Details
- Biological Growth

### 3.3-4 Tympanum and Voussoirs

- Carbon Deposits
- Eroding Details

# Stanford White Triple Portal

## Detail Images



### 2.3-5 Inspiration Band

- Deteriorated Open Joint
- Carbon Deposits Caused by Open Mortar Joints Above

### 2.3-6 Metal Decoration

- Rusting Metal Window Detail

### 3.3-7 Park Avenue Entry Steps

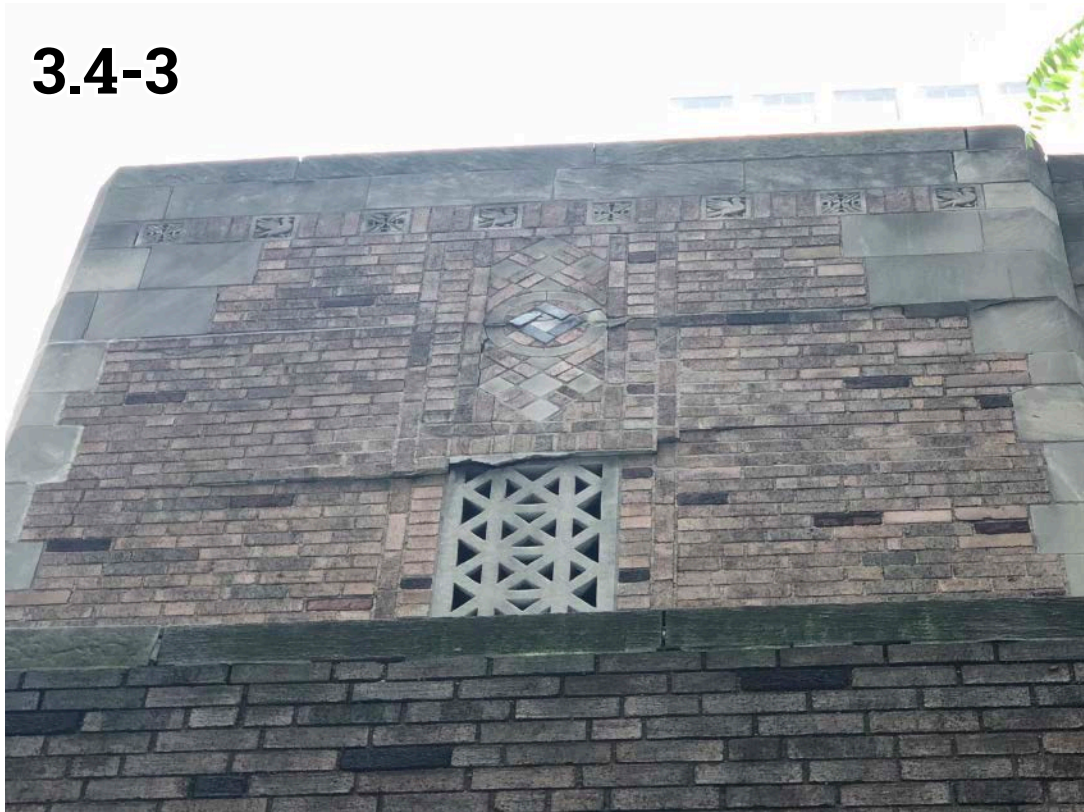
- Deteriorated Mortar Joints
- Cracked Stone Pavers

### 3.3-8 West Entry Railings

- Non-Compliant Spacing Between Railings

# Community House Exterior Facades

## Exterior Details



### 3.4-1 South Facade Corner

- Biological Growth, Typical
- Cracked Brick
- Failing Mortar Joints
- Cracked Stone

### 3.4-2 South Facade Corner

- Location of Emergency Repairs at Community House Corner

### 3.4-3 South Facade

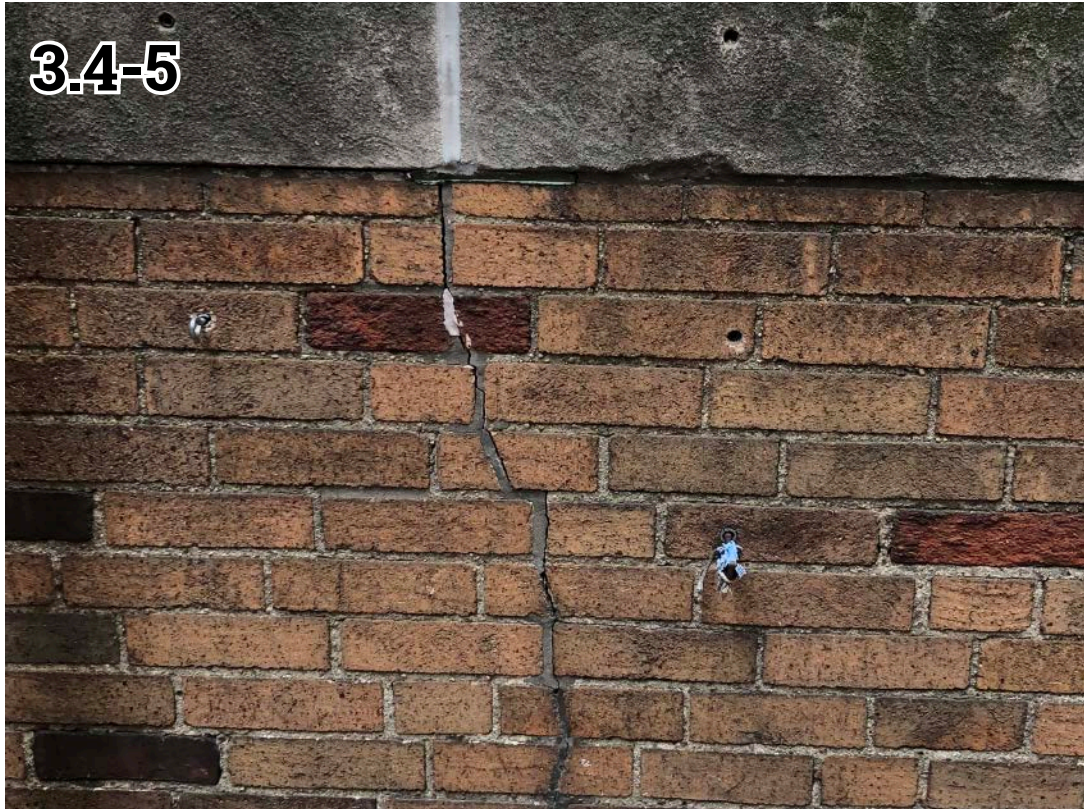
- Cracked Stone
- Rust Jacking

### 3.4-4 West Facade

- Cracked Brick
- Failing Mortar Joints
- Cracked Stone

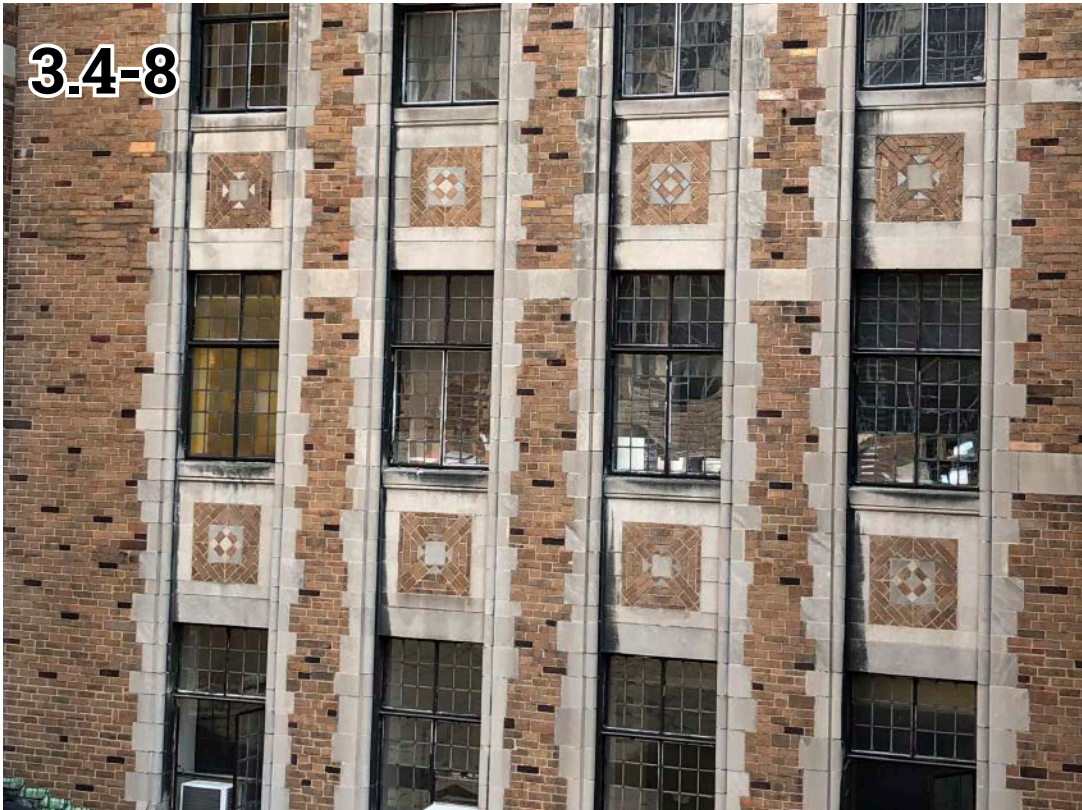
# Community House Exterior Facades

## Exterior Details



**3.4-5 Parapet**  
• Cracked Brick

**3.4-6 North Facade**  
• Failing Mortar Joints  
• Cracked Stone



**3.4-7 West Facade Detail**  
• Rust Jacking

**3.4-8 Community House Facade**  
• Inefficient and Damaged Windows

# Community House Exterior Facades

## Exterior Details



3.4-9



3.4-10



3.4-11



3.4-12

### 3.4-9 Window, Typical

- Carbon Deposits
- Deteriorating Frame, Mullions, and Debris Accumulation
- Cracked Stone

### 3.4-10 Limestone Grills

- Cracked and Damaged Stone

### 3.4-11 Garth Air Intake

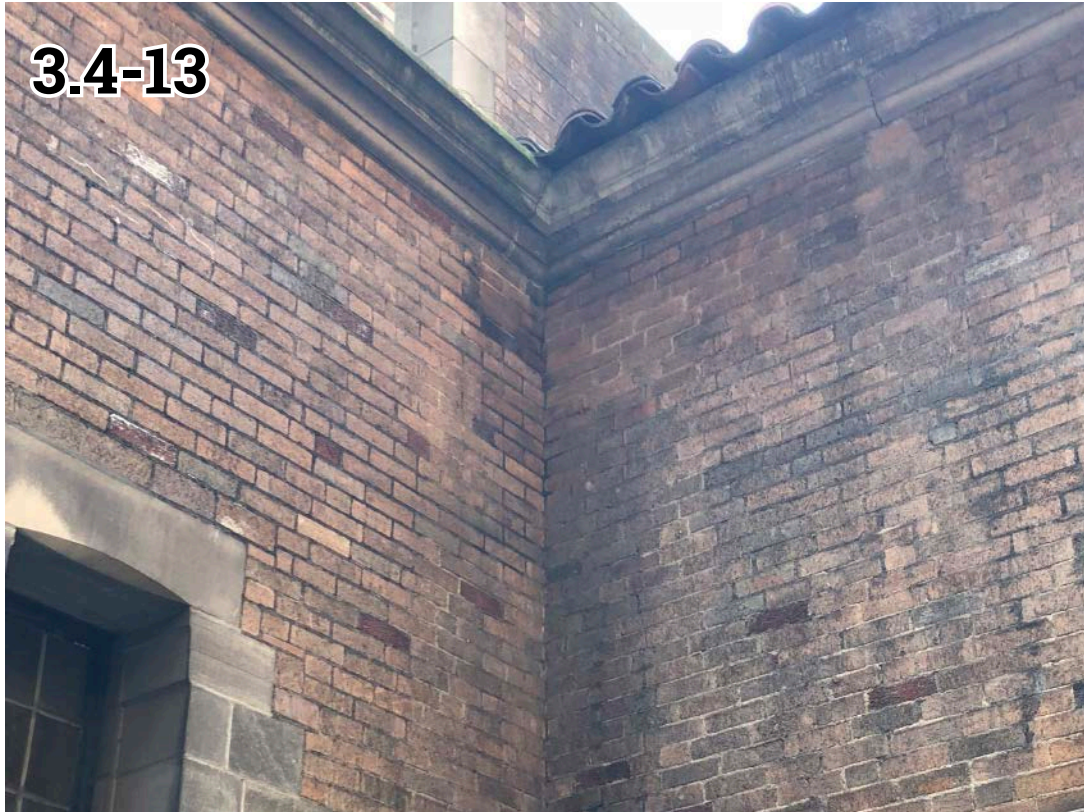
- Grills in the Garth serve as air intake for some of the buildings interior systems.

### 3.4-12 South Facade

- Deteriorating Stone

# Community House Exterior Facades

## Exterior Details



**3.4-13 Inner Courtyard**

- Carbon Deposits
- Dirt Accumulation

**3.4-14 Inner Courtyard**

- Spalling Stone Steps



**3.4-15 Community House Entrance**

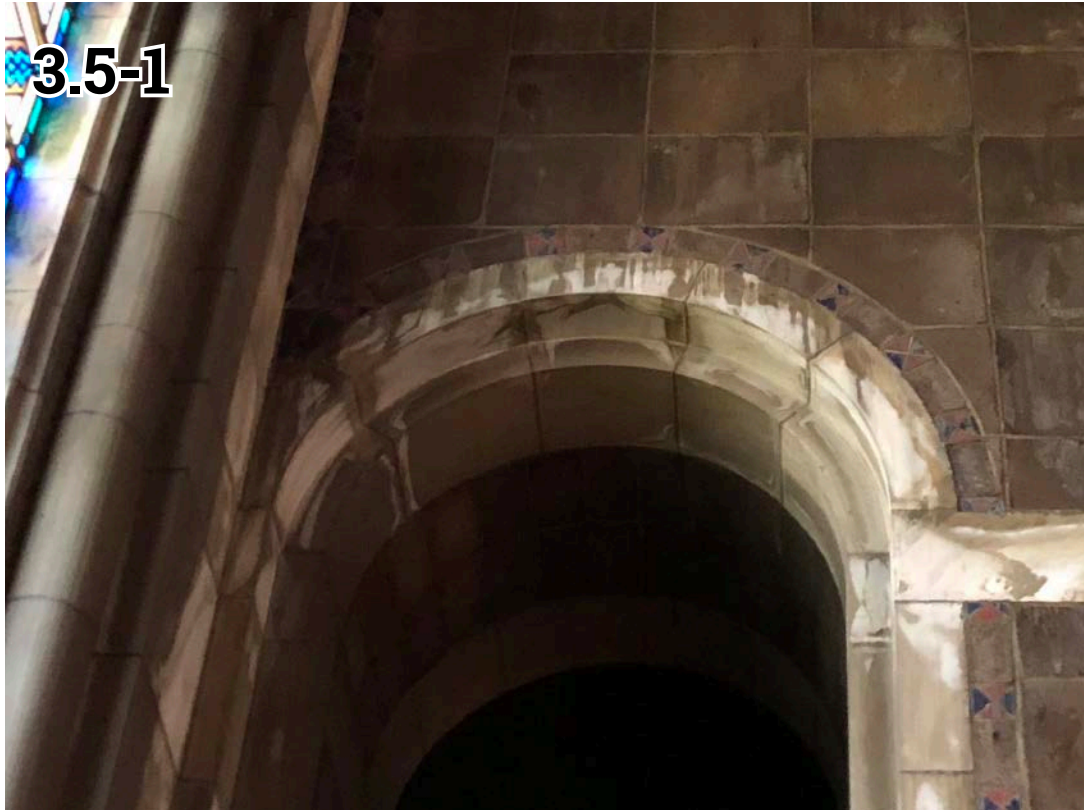
- Cracked Limestone

**3.4-16 Garth Doors**

- Rusting Doors

# Interior Infiltration

## Water Damage Details



**3.5-1 Interior Water Damage**  
• Interior Damage Caused by Leaking Above

**3.5-2 Stained Glass Window**  
• At many stained-glass window locations, water infiltration is made apparent from visible staining at the window sill.



**3.5-3 Interior Water Damage**  
• Interior Damage Caused by Leaking Roof Above

**3.5-4 Interior Water Damage**  
• Interior Damage Caused by Leaking At Lintel



**Appendix A:  
Detailed Schedule  
and Scope of Work**

# Continued Maintenance Schedule

Location	Item	General Scope	Estimated Construction Duration (In Months)												Priority	Anticipated Cost* in Millions	Notes					
			1	2	3	4	5	6	7	8	9	10	11	12								
Church	Exterior Maintenance Repairs	North Façade	1	Masonry Repairs													Medium Priority	\$7.60 - \$10.70				
			2	Stained Glass Windows																		
			3	Stone Colonnade Gallery																		
		South Façade	4	Masonry Repairs																		
			5	Stained Glass Windows																		
			6	Wheel Window																		
		East Façade	7	Stone Colonnade Gallery																		
			8	Masonry Repairs																		
			9	Tranluscent Stone Apse																		
		West Façade	10	Stone Colonnade Gallery																		
			11	Masonry Repairs																		
			12	Stained Glass Windows																		
		Roofs	13	Stone Colonnade Gallery																Low Priority	\$3.10 - \$3.70	
			14	Triple Portal																		
			15	Entry Steps and Platfrom																		
	16		Mosaic Terra Cotta Dome													**	\$1.60 - \$2.40	Partial Emergency Repairs in 2015				
	17		Transcept Terra Cotta																			
	18		Naive Terra Cotta																			
	19		Apse Terra Cotta																			
	20		High Membrane Set-backs (east)																			
	21		High Membrane Set-backs (west)																			
	22		Choir Terra Cotta																			
	23		Chapel Terra Cotta																			
	24		East Side Memebrane																			
	Building Systems	25	Heating System																Low Priority	\$2.60 - \$3.20		
		26	Air Conditioning System																			
		27	Toilets and Plumbing Systems																			
		28	Lighting																			
		29	Fire Detection System																			
		30	Sprinkler Systems																			
		31	Electrical																			
		32	Hazardous Material Abatement****																			
Exterior	Site Element	33	Cheetham Garden												Low Priority	\$2.05 - \$2.65						
		34	Garth																			
		35	Park Avenue Gardens																			
		36	ROW (sidewalks and curbs)																			
Community House	Exterior Maintenance Repairs	North Façade	37	Windows												Low Priority	\$0.30 - \$0.50	Patrial Repairs 2015 (ongoing repairs remain)				
			38	Masonry and Steel Repairs																		
		South Façade	39	Windows																		
			40	Masonry and Steel Repairs																		
		East Façade	41	Windows																		
			42	Masonry and Steel Repairs																		
	West Façade	43	Windows																			
		44	Masonry and Steel Repairs																			
	Roofs	45	Community House Terrace													**	\$1.80 - \$2.40	Restroration Completed 2012 Replacement Completed 2014				
		46	Play Roof																			
		47	2nd Floor Membrane Roofs																			
		48	3rd Floor Terrace																			
		49	5th Floor Terrace																			
		50	Garth Terra Cotta																			
51		Penthouse Roof																				
52		Heating System																				
Building Systems	53	Air Conditioning System													Low Priority	\$2.35 - \$2.65						
	54	Toilets and Plumbing Systems																				
	55	Lighting																				
	56	Fire Detection System																				
	57	Sprinkler Systems																				
	58	Electrical																				
	59	Hazardous Material Abatement****																				
<b>Total</b>													<b>\$30.00 - \$40.00</b>									

NOTES:  
 \* Construction cost estimates shown are derived from a mix of professional experiance and specific line items with returned hard bids. Acheson Doyle Partners Architects holds no responsibility for finite numbers shown and should be treated as a rough estimate. Further, cost analysis shown was completed in August of 2018 and appropriate consideration should be taken for inflation and changes in local construction costs when referencing pricing in the future.  
 \*\* Number shown is total expense paid for item.  
 \*\*\* Hard bids for the Community House have been received from contractors.  
 \*\*\*\* Asbestos/Hazardous Material Abatement quantities TBD, but would be budgeted on the high end because of phasing and fully occupied premises.

KEY

	Higest Priority
	Medium Priority
	Low Priority
	Existing Work Complete and in Satisfactory Condition
	Existing Work Complete and Condition Requires Further Attention

# Continued Maintenance

## Scope of Work

### Completed Restorations

- 01 Restoration of Community House Terrace and Parapets
- 02 Replacement of Terra-cotta Mosaic Tile Dome Cladding with Brick/Stone Masonry Restoration
- 03 Mission Style Steep-Sloped Terra-cotta Roofing Replacements:
  - A Nave Roof
  - B Chancel Roof
  - C North Transept Roof
  - D South Transept Roof
  - E Choir Roof
- 04 Preschool Roof and Play Yard
- 05 Emergency Masonry/Steel Repairs to Removed DOB Violation and Community House (South Facade Corner)

### 1st Priority Maintenance Restorations

- 01 Community House Brick/Stone Masonry Repairs with Structural Steel Repairs\*:

Required to address pervasive compromised brick/stone masonry, open mortar joints, open cracks resulting from rust jacking.

  - A East Facade
  - B South Facade
  - C West Facade
  - D North Facade (Including Inner Courtyard)
- 02 Community House Steel Sash Window Restoration/Repairs:
  - A East Facade
  - B South Facade
  - C West Facade
  - D North Facade (Including Inner Courtyard)
- 03 Community House Roof Replacements
  - A 3rd Floor Terrace
  - B 5th Floor Terrace
  - C Penthouse Low-Slow Membrane
  - D Natatorium Exhaust Shaft Lining
  - E Natatorium Exhaust Shaft Weather Cap
  - F Lesser Low-Slope Membrane Setback Roofs (3rd & 5th)

### 04 Church Roof Replacements

- A Garth Mission Style Steep-Sloped Terra-cotta
- B Chapel Mission Style Steep-Sloped Terra-cotta
- C Remaining Low-slope Membrane at Various Set-back Roof Locations
- D Replace all Roof Drain Bodies at all Low-slope Membrane Roofs
- E Install Interior Lining at Existing Masonry Exhaust Shafts
- F Install Weather Cap at Existing Masonry Exhaust Shafts
- G Upgrade Select Parapets for Minimum Code Compliance Protection Heights

\*Note: Bart's has received bid for scopes 1 and 2. This work is anticipated to begin as soon as funding becomes available.

### 2nd Priority Maintenance Restorations

#### 01 North Facade of Church (Including Gallery Colonnade)

- A Masonry
  - Mortar Joint Cutting and Repointing (Brick & Stone)
  - Select Brick Unit Surface Patching
  - Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
  - Select In-laid Decorative Stone Replacements
  - Cleaning Masonry to Remove Staining Deposits
  - Install Bird Remediation Measures
- B Windows
  - On site restoration to address compromised glass and mullions, deteriorated exterior and interior finishes, sash operation, non-ferrous hardware repair and refinishing.
- C Stained Glass Windows
  - Minor Repairs to Address Broken Glass and Mullions
  - Cleaning and Sealing Required
  - Remove Discolored, Un-vented Exterior Glazing Panels
  - Install Exterior Protection with Appropriated Glazing Material and Venting.
- D Doors
  - Install Historically Appropriate Sidewalk Level Wood Entry Doors

#### 02 South Facade of Church (Including Gallery Colonnade)

- A Masonry
  - Mortar Joint Cutting and Repointing (Brick & Stone)
  - Select Brick Unit Surface Patching
  - Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
  - Select In-laid Decorative Stone Replacements
  - Cleaning Masonry to Remove Staining Deposits
  - Install Bird Remediation Measures
- B Windows
  - On site restoration to address compromised glass and lead came glazing, deteriorated exterior and interior finishes, sash operation, non-ferrous hardware repair and refinishing.
- C Stained Glass Windows
  - Minor Repairs to Address Broken Glass and Mullions
  - Cleaning and Sealing Required
  - Remove Discolored, Unvented Exterior Glazing Panels
  - Install Exterior Protection with Appropriated Glazing Material and Venting
- D Wheel Windows
  - Mortar Joint Cutting and Repointing (Brick & Stone)
  - Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
  - Replace Broken Stabilized Stone (Spoke & Tracery)
  - Cleaning & Sealing Required
  - Install Bird Deterrent Measures

#### 03 East Facade of Church (Including Gallery Colonnade)

- A Masonry
  - Mortar Joint Cutting and Repointing (Brick & Stone)
  - Select Brick Unit Surface Patching
  - Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
  - Select In-laid Decorative Stone Replacements
  - Cleaning Masonry to Remove Staining Deposits
  - Install Bird Deterrent Measures

# Continued Maintenance

## Scope of Work

### B Windows

- On site restoration to address compromised glass mullions, deteriorated exterior and interior finishes, sash operation, non-ferrous hardware repair and refinishing.
- Remove Plywood Infill Panels & Gallery and Install Protective Screen

### C Stained Glass Windows

- Minor Repairs to Address Broken Glass and Mullions
- Cleaning and Sealing Required
- Remove Discolored, Unvented Exterior Glazing Panels
- Install Exterior Protection with Appropriated Glazing Material and Venting.

### D Apse Onyx Stone Windows

- Mortar Joint Cutting & Repointing (Stone)
- Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
- Remove Discolored, Unvented Exterior Glazing Panels
- Install Exterior Protection with Appropriate Glazing Material and Venting
- Install Bird Deterrent Measures and Lighting for Interior Illumination

## 04 West Facade of Church (Including Gallery Colonnade)

### A Masonry

- Mortar Joint Cutting and Repointing (Brick & Stone)
- Select Brick Unit Surface Patching
- Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
- Select In-laid Decorative Stone Replacements
- Cleaning Masonry to Remove Staining Deposits
- Install Bird Deterrent Measures

### B Stained Glass Windows

- Minor Repairs to Address Broken Glass and Mullions
- Cleaning and Sealing Required
- Remove Discolored, Unvented Exterior Glazing Panels
- Install Exterior Protection with Appropriated Glazing Material and Venting.

### C Stone Tympanum

- Mortar Joint Cutting and Repointing (Brick & Stone)
- Select Limestone Patching (w/ Select Dutchman and Unit Replacements)
- Cleaning Masonry to Remove Staining Deposits
- Install Bird Remediation Measures

## Third Priority Maintenance Restorations

### 01 Stanford White Triple Portal

- A** Replace existing stone columns deteriorated beyond repair and provide stone patching repairs to carved column capitols (24 total).
- B** Restore wood/glass/metal to original pocket-swing function.
- C** Rebuild with replacement stone materials the existing steps and platform in their entirety.
- D** Mortar joint cutting and repointing throughout stone material.
- E** Select limestone patching at frieze tympanums (w/ select dutchman and carved detailed replacements).
- F** Install historically appropriated coping at top of parapet.
- G** Refinish bronze railing and recreate matching units to comply with code requirements.
- H** Clean/refinish and recondition interior monumental bronze doors.
- I** Restore and repair hardware to full swing functionally.
- J** Refinish existing ferrous metal window grilles and directory kiosk.

### 02 Cheatham Garden

- A** Redesign and Restore Based on Determined Program Need

### 03 Sidewalks and Curbs

- A** Yearly on-going repairs and section replacements for compliance with DOT and insurance requirements.

### 03 Mechanical, plumbing, electrical, fire detection and fire protection systems.

### 04 Interior materials/ finishes, audio and lighting systems.



**Appendix B:  
Detailed Exterior Scope Plans  
and Elevations**

# Roof Conditions

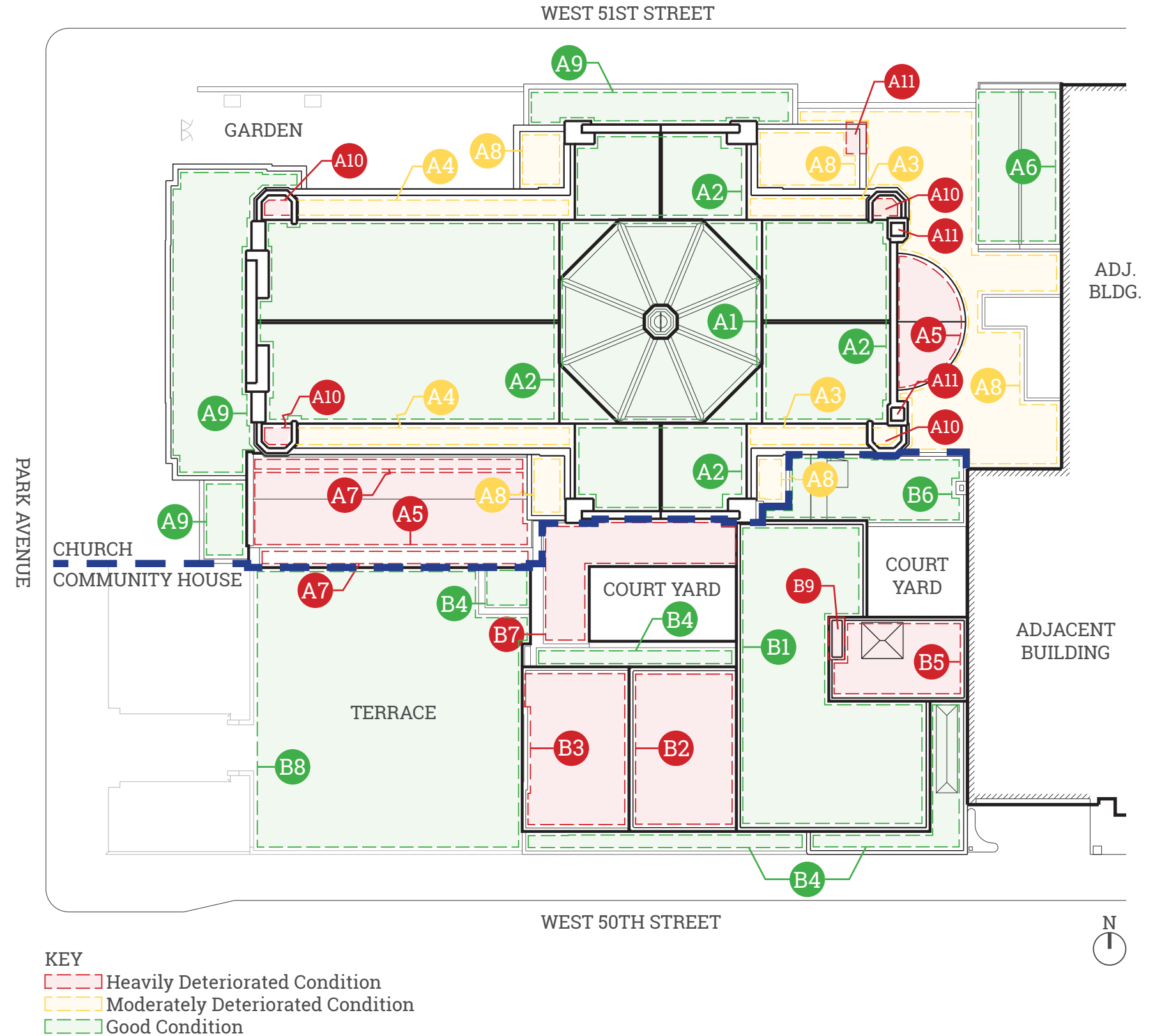
## Outline

### Church

- A1** Historic restoration of Terra-cotta and stone dome completed in 2017.
- A2** Historic restoration of upper steep sloped Terra-cotta roof completed in 2017.
- A3** Existing Terra-cotta roof tile and aging ballasted roofing membrane - replacement required.
- A4** Existing Terra-cotta roof tile replacement required. Recently installed cold-fluid applied roofing membrane.
- A5** Original Terra-cotta roof tile: replacement required.
- A6** Historic restoration of Terra-cotta roof complete in 2017.
- A7** Existing Terra-cotta roof tile original installation: replacement required. Flat membrane roof replacement required.
- A8** Aging ballasted roofing membrane: replacement required.
- A9** Recently installed cold-fluid-applied roofing membrane.
- A10** Membrane roofing and drain/scupper replacement required.
- A11** Mechanical Shaft: interior masonry wall deteriorated. Relining and weather cap required.

### Community House

- B1** Recently installed cold-fluid applied roofing membrane.
- B2** Membrane roofing installed over original Terra-cotta paver surface (active leaks reported. Damage to finish space below - immediate replacement required.
- B3** Original Terra-cotta paver surface w/ waterproofing membrane below. (Active leaks reported. Damage to interior finishes. On-going masonry parapets and wall displace open joists and displacement. Assessment for extent of damage to existing steel requires destructive probes.)
- B4** Recently installed cold-fluid applied roofing membrane.
- B5** Observation and assessment required.
- B6** Existing roofing membrane in serviceable condition.
- B7** Original Terra-cotta roof tile: replacement required.
- B8** Existing Terrace restored in 2010.
- B9** Mechanical Shaft: Interior masonry wall deteriorated. Relining and weather cap required.



# Church Exterior

## North Facade

### A Completed Dome Repair

Dome masonry and minor Terra-cotta roof restoration completed in spring of 2017.

### B Colonnade Repair

Replacement of multi-stone types, selective patching of columns, limestone coping and capitals, mortar joint repointing, upgrades to gallery walk waterproofing, and general masonry cleaning

### C Completed Roof Repair

Replacement of nave and north/south transept Terra-cotta roofs completed in spring of 2017

### D Conical Apse Roof Repair

Replace flashing at bases and caps, walls, and eaves. Re-use custom sloped Terra-cotta units where possible.

### E Door Repair

Existing entry/access doors restoration to address maintenance and accessibility requirements. Typical throughout.

### F Waterproofing Repair

Membrane roofing replacement. Project requirements will need to address requirements for parapet / railing protection at roof perimeters.

### G Conical Apse Repair

Replace flashing at bases, caps, walls, and eaves. Reuse custom sloped terra-cotta units where possible. Brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents/inlays. Translucent stone panels: repointing, installation of protective glazing, and artificial illumination to be considered as part of overall restoration.

### H Stained Glass Window Repair

Stained glass windows: selective glazing and mullion repairs. Cleaning and sealing methods to match existing conditions. Installation of exterior applied and vented protective glazing units.

### I Window Repair

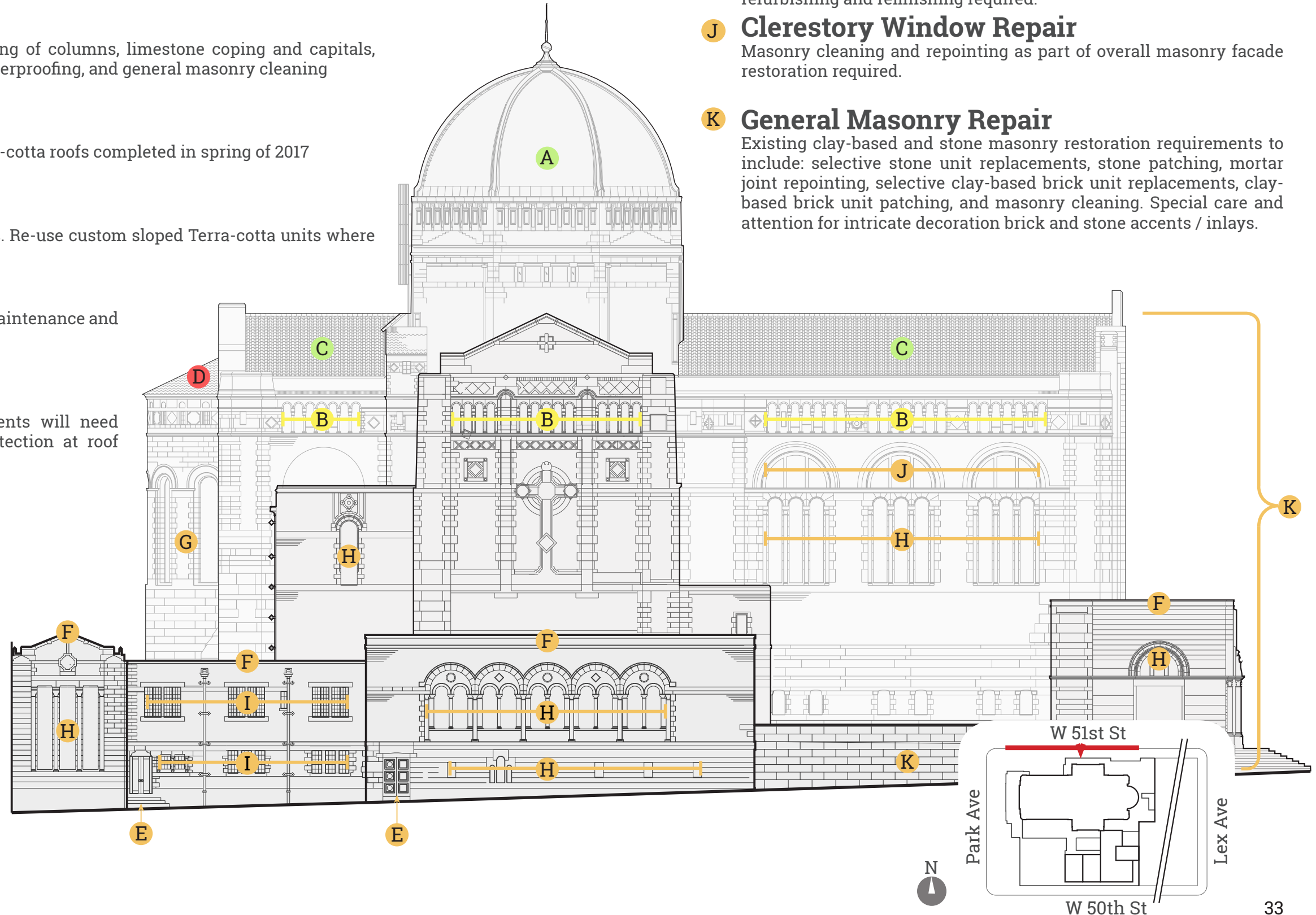
Existing mullion and art glass steel sash casement windows: in place refurbishing and refinishing required.

### J Clerestory Window Repair

Masonry cleaning and repointing as part of overall masonry facade restoration required.

### K General Masonry Repair

Existing clay-based and stone masonry restoration requirements to include: selective stone unit replacements, stone patching, mortar joint repointing, selective clay-based brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents / inlays.

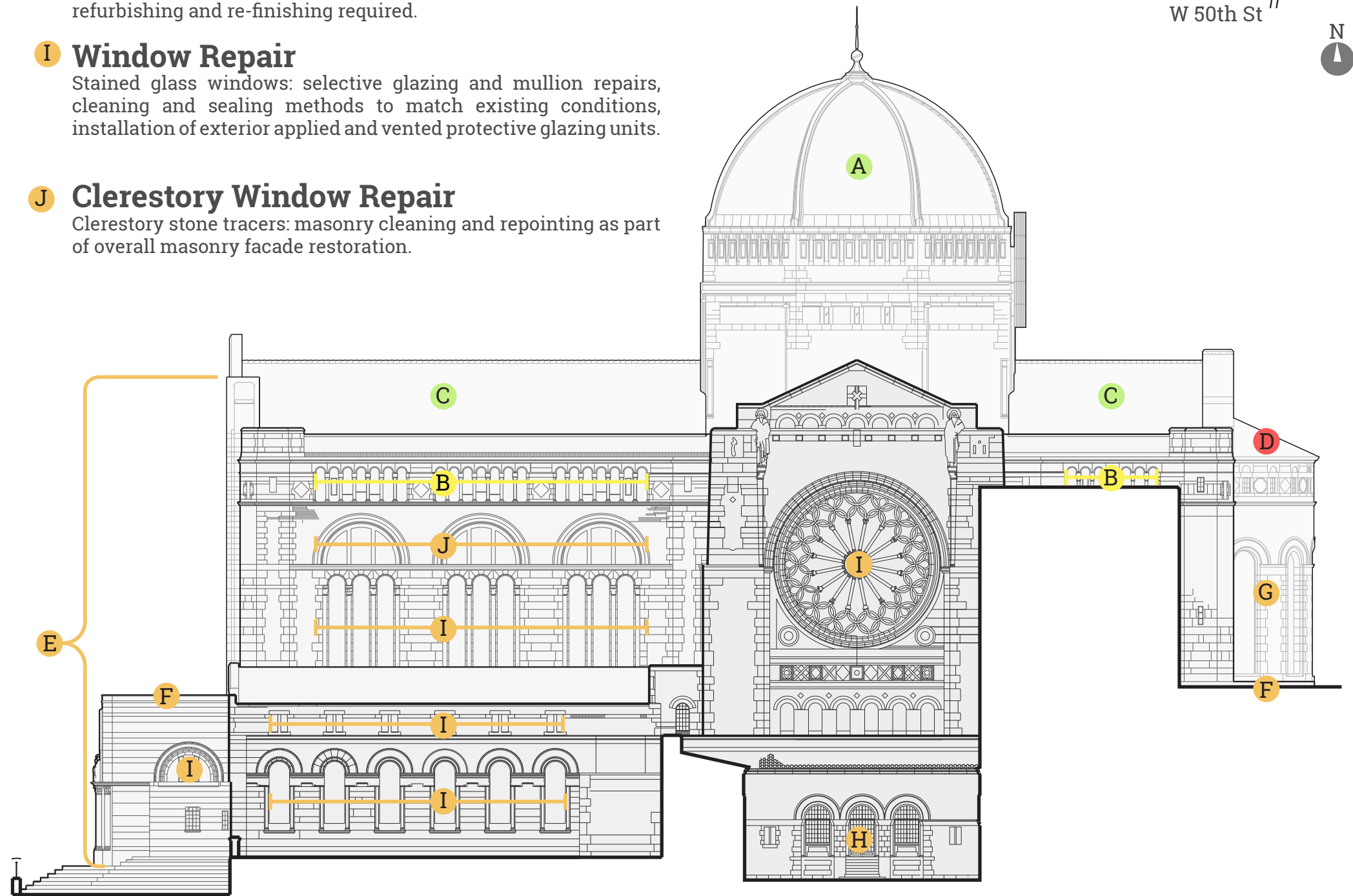
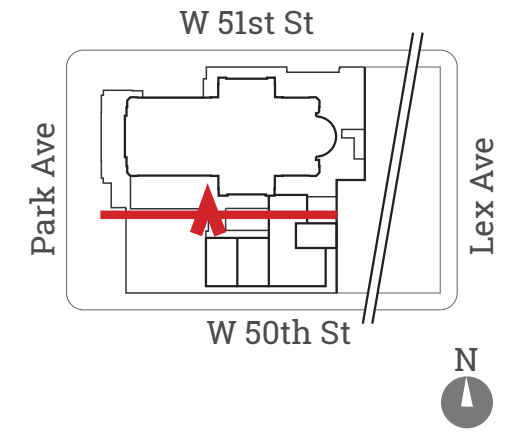


# Church Exterior

## South Facade

- A Completed Dome Repair**  
Dome masonry and minor Terra-cotta roof restoration completed in spring of 2017.
- B Colonnade Repair**  
Replacement of multi-stone types, selective patching of columns, limestone coping and capitals, mortar joint repointing, upgrades to gallery walk waterproofing, and general masonry cleaning.
- C Completed Roof Repair**  
Replacement of nave and north/south transept Terra-cotta roofs completed in spring of 2017. .
- D Conical Apse Roof Repair**  
Replace flashing at bases and caps, walls, and eaves. Re-use custom sloped Terra-cotta units where possible.
- E General Facade Repair**  
Existing clay-based and stone masonry restoration requirements to include: selective stone unit replacements, stone patching, mortar joint repointing, selective clay-based brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents /inlays.
- F Waterproofing Repair**  
Membrane roofing replacement. Project requirements will need to need to address requirements for parapet/railing protection at roof perimeters.
- G Conical Apse Repair**  
Replace flashing at bases, caps, walls, and eaves. Reuse custom sloped terra-cotta units where possible. Brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents/inlays. Translucent stone panels: repointing, installation of protective glazing, and artificial illumination to be considered as part of overall restoration.

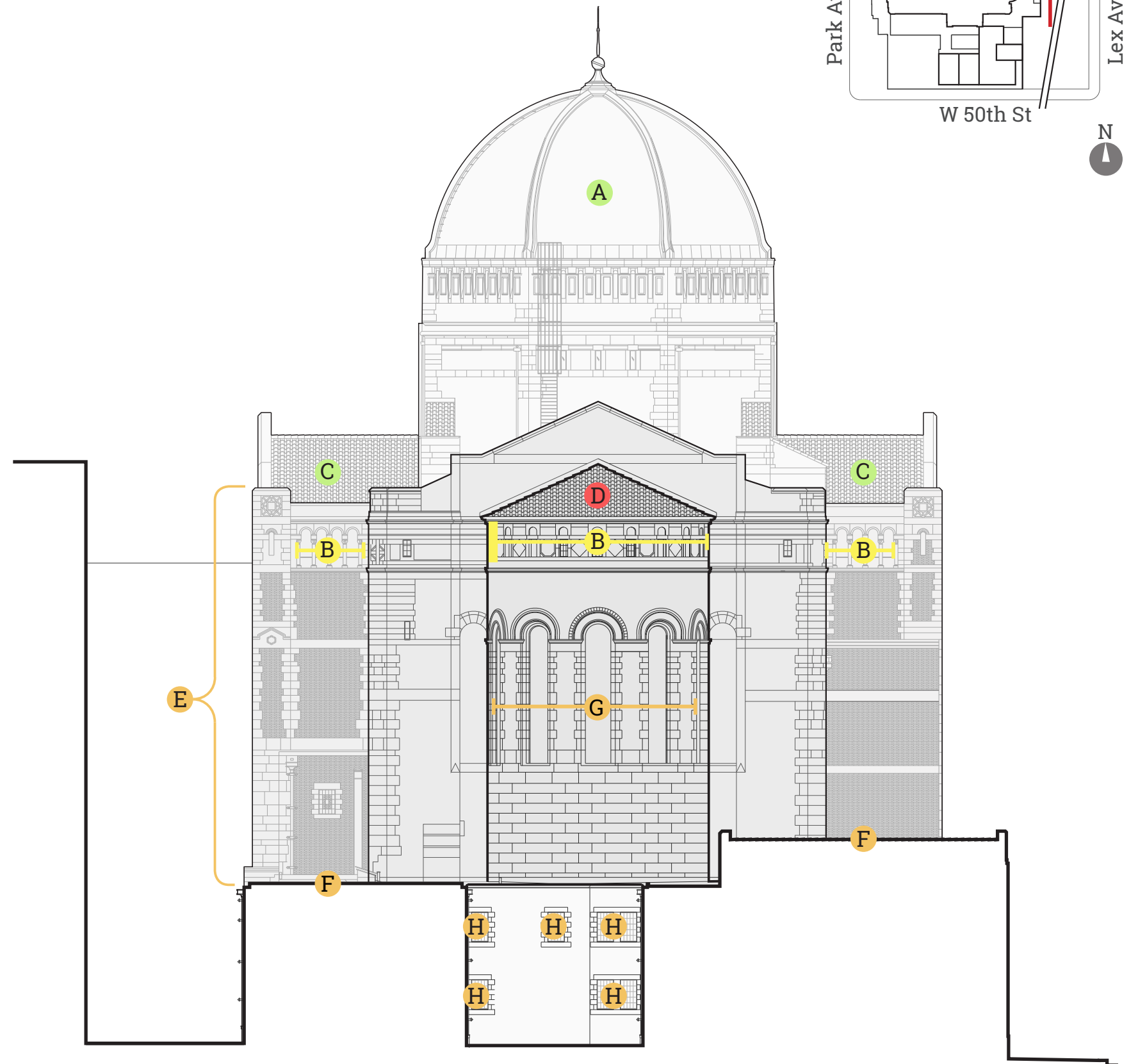
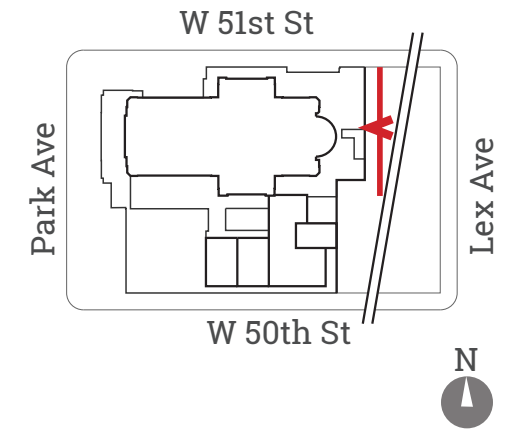
- H Courtyard Door and Window Repair**  
Existing mullions & art glass steel sash casement doors, in place refurbishing and re-finishing required.
- I Window Repair**  
Stained glass windows: selective glazing and mullion repairs, cleaning and sealing methods to match existing conditions, installation of exterior applied and vented protective glazing units.
- J Clerestory Window Repair**  
Clerestory stone tracers: masonry cleaning and repointing as part of overall masonry facade restoration.



# Church Exterior

## East Facade

- A Completed Dome Repair**  
Dome masonry and minor Terra-cotta roof restoration completed in spring of 2017.
- B Colonnade Repair**  
Replacement of multi-stone types, selective patching of columns, limestone coping and capitals, mortar joint repointing, upgrades to gallery walk waterproofing, and masonry cleaning.
- C Completed Roof Repair**  
Replacement of nave and north/south transept Terra-cotta roofs completed in spring of 2017.
- D Conical Apse Roof Repair**  
Replace flashing at bases and caps, walls, and eaves. Re-use custom sloped Terra-cotta units where possible.
- E General Facade Repair**  
Existing clay-based and stone masonry restoration requirements to include: selective stone unit replacements, stone patching, mortar joint repointing, selective clay-based brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents / inlays.
- F Waterproofing Repair**  
Membrane roofing replacement: project requirements to address requirements for parapet / railing protection at roof perimeters.
- G Conical Apse Repair**  
Replace flashing at bases, caps, walls, and eaves. Reuse custom sloped terra-cotta units where possible. Brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents/inlays. Translucent stone panels: repointing, installation of protective glazing, and artificial illumination to be considered as part of overall restoration.
- H Window Repair**  
Interior court with mullions and divided tile glazing. Cleaning debris, providing controlled access of future programmed use(s), in plane refurbishing of windows, repointing clay-based brick and stone masonry, and installation of bird access remediation measures.



# Church Exterior

## West Facade

### A Completed Dome Repair

Dome masonry and minor Terra-cotta roof restoration completed in spring of 2017.

### B Colonnade Repair

Restoration requirements to include: selective replacement of multi-stone types. Selective patching of columns, and limestone coping and capitals, mortar joint repointing, upgrades to gallery walk water proofing, and general masonry cleaning.

### C Completed Roof Repair

Replacement of naive and north/south transept Terra-cotta roofs completed in spring of 2017.

### D Stanford White Triple Portal

See page 37 for details.

### E General Facade Repair

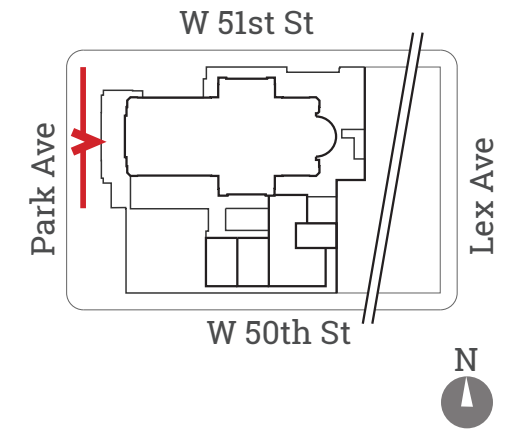
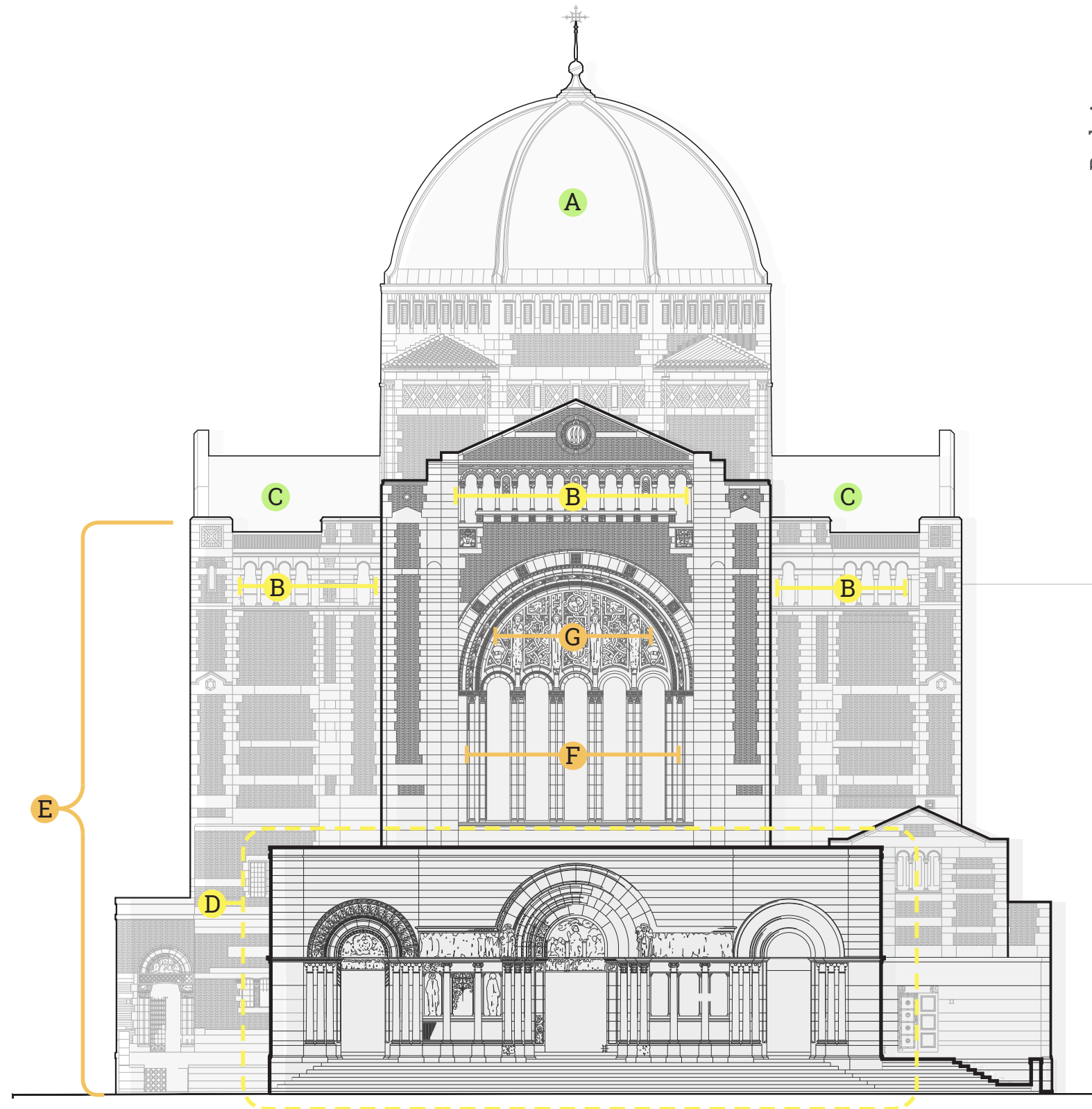
Existing clay-based and stone masonry restoration requirements to include: selective stone unit replacements, stone patching, mortar joint repointing, selective clay-based brick unit replacements, clay-based brick unit patching, and masonry cleaning. Special care and attention for intricate decoration brick and stone accents / inlays.

### F Stained Glass Window Repair

Restoration requirements to include: selective glazing and mullion repairs, cleaning and sealing method to match historic condition, installation of exterior applied and vented protective glazing units.

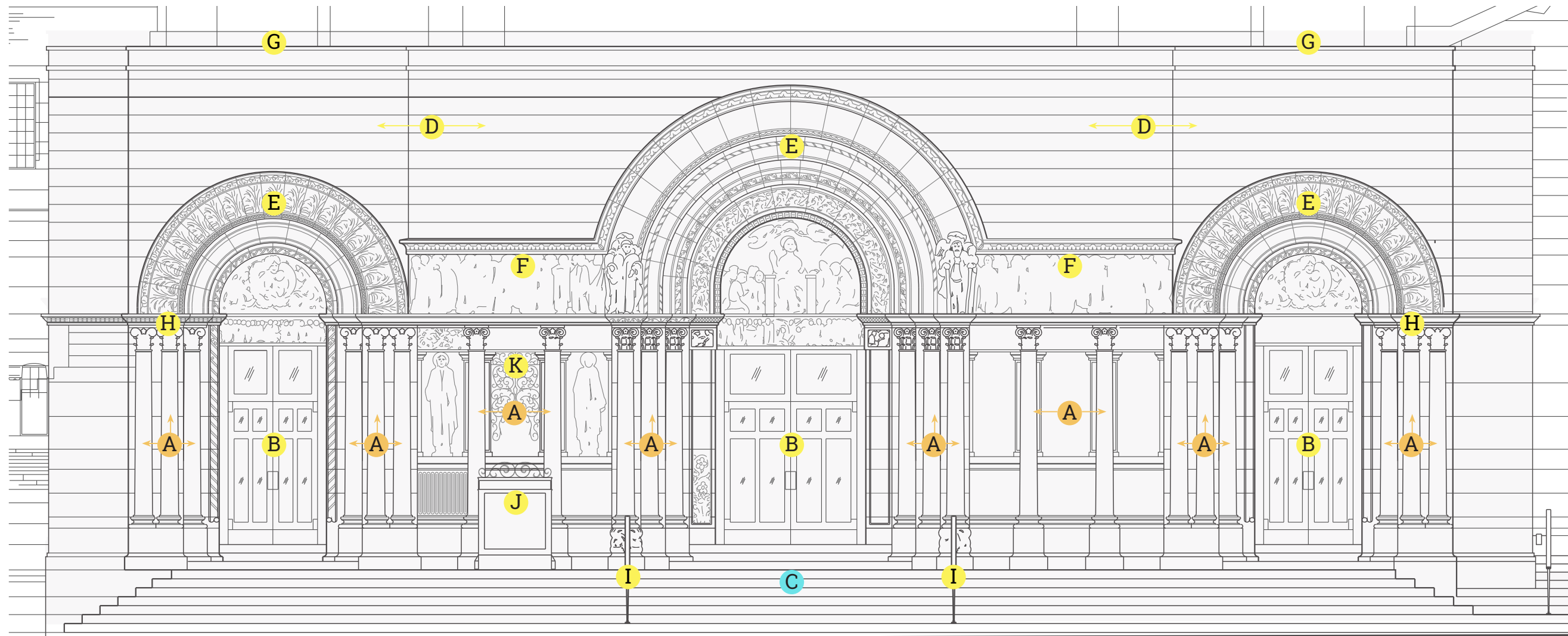
### G Tympanum Repair

Restoration requirements to include: selective custom replacements of lost details, stone patching, mortar joint repointing, and masonry cleaning.



# Church Exterior

## Stanford White Triple Portal



### Stanford White Triple Portal

NTS

- A** Deteriorating stone columns.
- B** Weathering wood doors and non-operational pocket sliding function
- C** Limestone Steps: Misaligned from heaving, spalling, cracked, and compromised mortar joints.
- D** Dimensioned limestone cladding: compromised mortar joints, miscellaneous spalling, surface staining, and deposits.
- E** Eroded limestone tympanum and voussoirs, Surface staining/accumulated deposits on details.
- F** Eroded frieze details, surface staining/deposits.
- G** En sized inspiration band/stone coping. Open horizontal joints causing water infiltration.
- H** Carved limestone capitals: eroded details, surface staining/accumulated carbon deposits.
- I** Bronze railing: position and spacing non-compliant per NYCBC.
- J** Ferrus metal directory display: refurbishing required.
- K** Rusted metal screen: refurbishing required.

# Community House Exterior

## North Facade

### A Limestone and Brick Repair

Compromised Limestone and brick masonry from rust-jacking. Remove masonry and/or Limestone to expose steel for assessment. Repairs following inspection as to be determined.

Locations where repairs to existing structural steel may be required.

1. Expose steel, remove rust, prepare surfaces for prime and rust inhibited top coat.
2. Expose steel, remove rust, install steel shape reinforcing plates, prepare surfaces for primer and rust inhibited top coat.
3. Expose and remove deteriorated steel to install replacement steel member.

### B Window Repair

Existing steel sash casement windows with mullions and clear/art glass glazing. In place restoration to include: glazing removal, steel sash and frame stripping. Selective repairs to include; glazing, sash/frame, and hardware. Clean seal glazing and reinstall.

### C General Facade Repair

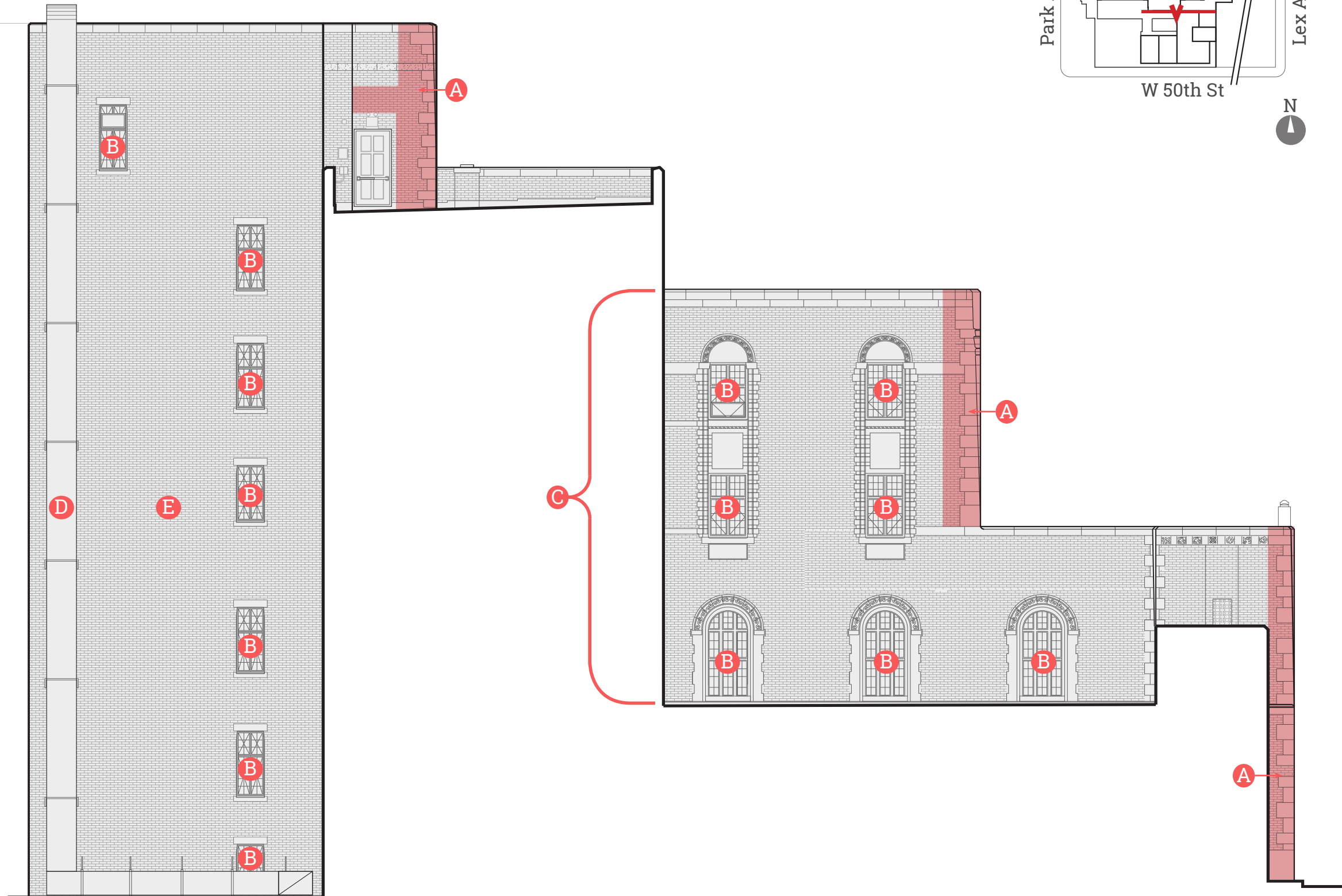
Existing clay based and stone masonry restoration requirements to include: selective stone unit replacements (20%), stone patching, mortar joint repointing (100%), salvaged clay-based brick unit with brick replacement units (50-50 blending), clay-based brick unit patching and masonry cleaning.

### D Duct Repair

Existing rusting sheet metal exhaust duct. Rust removal, prime and top coat application for anti-corrosive protection required.

### F Repointing

Mortar joint cutting and repointing for entire area of clay-based brick masonry.





# Community House Exterior

## East Facade

### A Selective Limestone and Brick Repair

Compromised Limestone and brick masonry from rust-jacking. Remove masonry and/or Limestone to expose steel for assessment. Repairs following inspection as to be determined.

Locations where repairs to existing structural steel may be required

1. Expose steel, remove rust, prepare surfaces for prime and rust inhibited top coat.
2. Expose steel, remove rust, install steel shape reinforcing plates, prepare surfaces for primer and rust inhibited top coat.
3. Expose and remove deteriorated steel to install replacement steel member.

### B Window Repair

Existing steel sash casement windows with mullions and clear/art glass glazing. In place restoration to include; glazing removal, steel sash and frame stripping. Selective repairs to include: glazing, sash/frame, and hardware. Clean seal glazing and reinstall.

### C Completed Masonry Repair

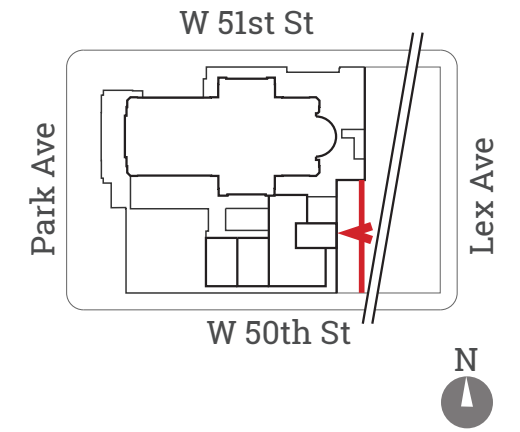
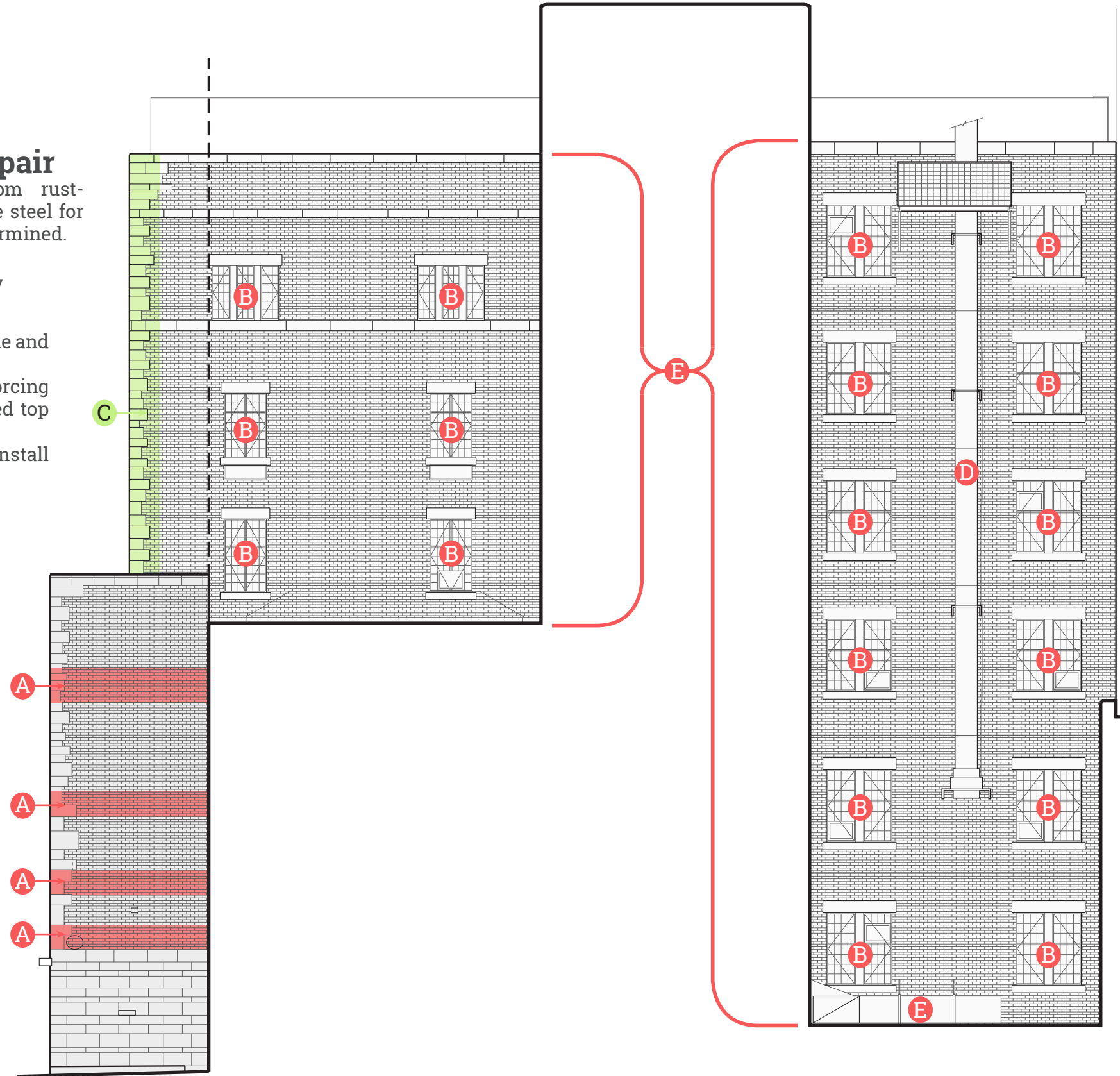
Stone, brick masonry, and steel repair completed in summer of 2017.

### D Duct Repair

Existing rusting sheet metal exhaust duct. Rust removal, prime and top coat application for anti-corrosive protection required.

### E Mortar Repointing

Mortar joint cutting and repointing for entire area of clay-based brick masonry.



# Community House Exterior

## West Facade

### A Selective Brick and Limestone Repair

General extent of Limestone and clay-based brick masonry compromised by rust-jacking. Remove masonry and/or Limestone to expose steel for assessment. Repairs following inspection as reconstruction required.

Locations where repairs to existing structural steel may be required (three categories of repairs).

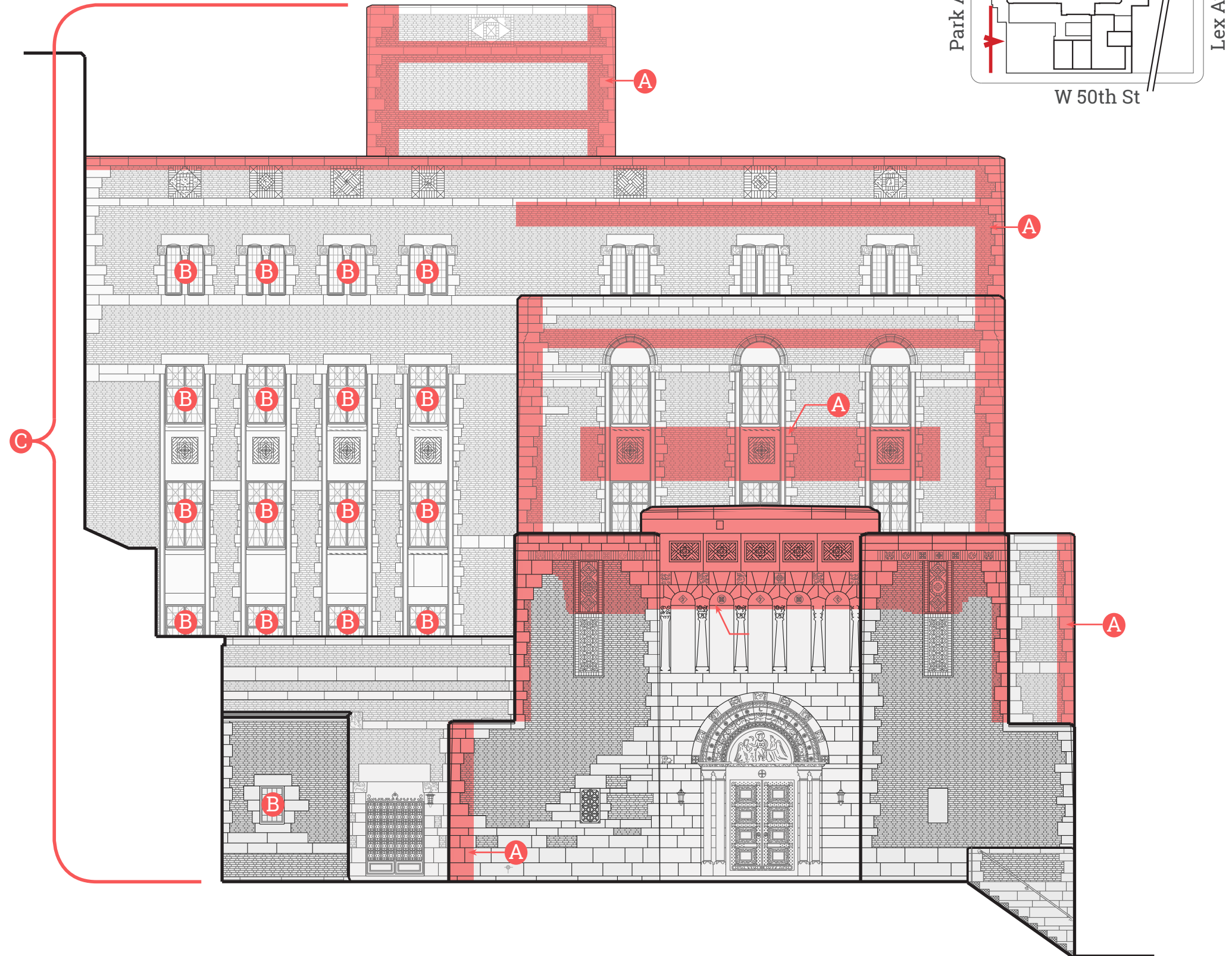
1. Expose steel, remove rust, prepare surfaces for prime and rust inhibited top coat.
2. Expose steel, remove rust, install steel shape reinforcing plates, prepare surfaces for primer and rust inhibited top coat.
3. Expose and remove deteriorated steel to install replacement steel member.

### B Window Repair

Existing steel sash casement windows with mullions and clear/art glass glazing. In place restoration to include: glazing removal, steel sash and frame stripping. Selective repairs to include; glazing, sash/frame, and hardware. Clean seal glazing and reinstall.

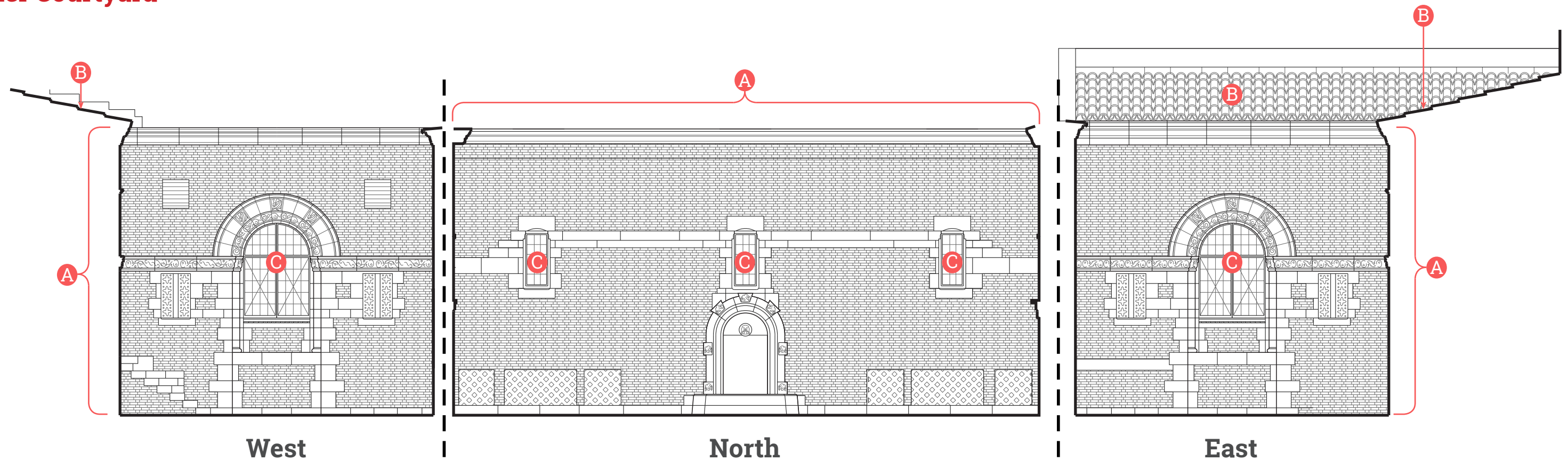
### C Facade Repair

Existing clay based and stone masonry restoration requirements to include: selective stone unit replacements (20%), stone patching, mortar joint repointing (100%), salvaged clay-based brick unit with brick replacement units (50-50 blending), clay-based brick unit patching and masonry cleaning.



# Community House Exterior

## Inner Courtyard



### A Facade Repair

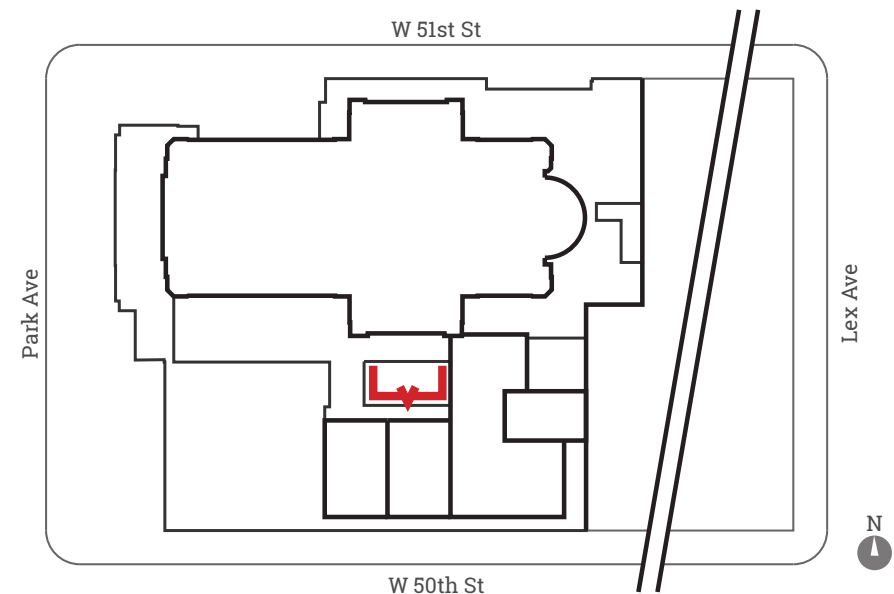
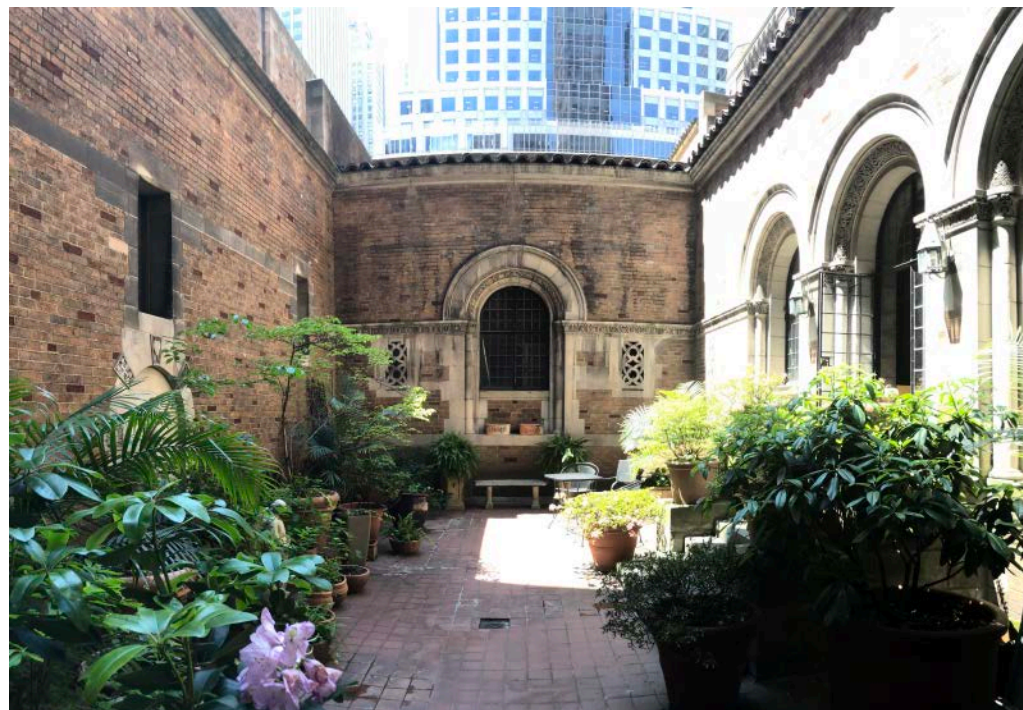
Garth Facades (West, North, and South) - existing clay-based brick and stone masonry. Restoration requirements to include: limited stone unit patching, stone mortar joints, repointing, and selective brick mortar joint repointing (20%-30%).

### B Waterproofing Flashing Repair

Steep-sloped Terra-cotta roofing and metal flashings to be replaced.

### C Window/Door Repair

Existing steel sash casement and fixed windows with mullions and clear glass glazing - in place restoration to include: (1) glazing removal, (2) steel sash / frame stripping and refinishing, (3) select repairs to glazing, sash/ frame and hardware, (4) clean/seal glazing and reinstall.





# **Appendix C: Interior Observations and Assessments**

# Interior Observations

## Interior Finishes & Details



**C.1-1 Peeling Paint/Plaster**

- Peeling Paint/Plaster

**C.1-2 Floor Repair**

- Dirt and Debris Accumulation
- Damaged Floor Tile

**C.1-3 Damaged / Missing Details**

- Missing Sculptural Details

**C.1-4 De-laminating Paint**

- De-laminating Paint

# Interior Observations

## MEP Systems



### Plumbing & Steam Heating

#### C.2-1 Galvanized Piping

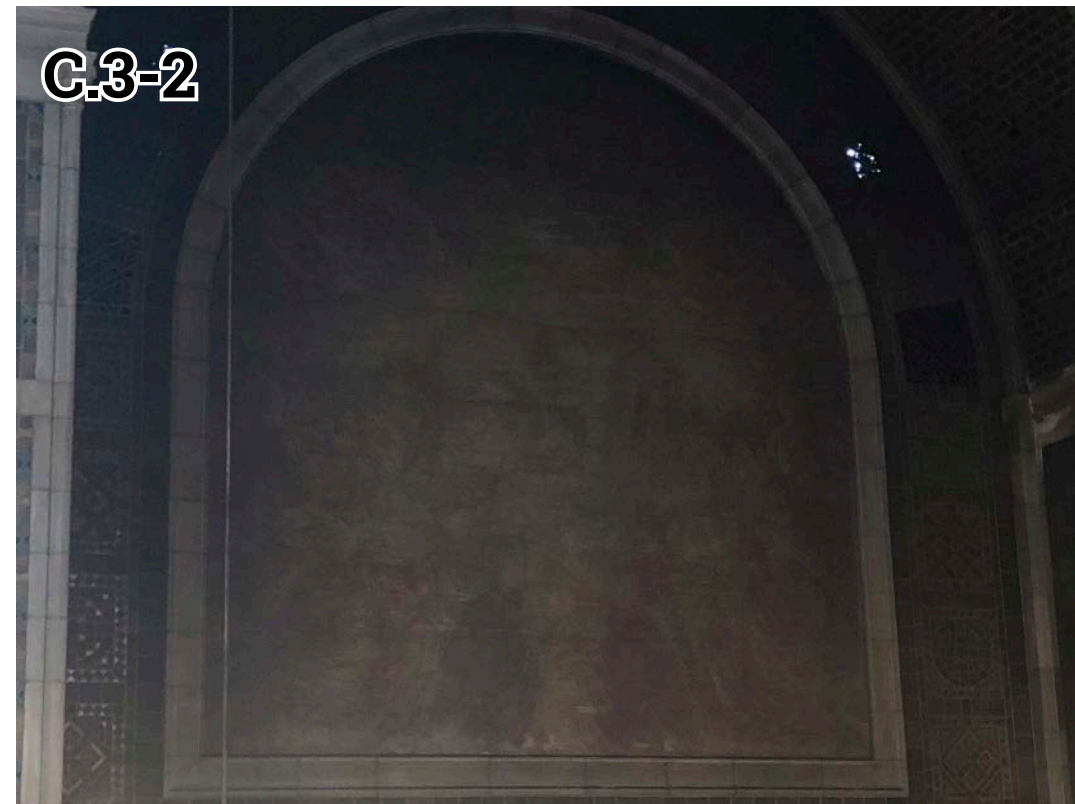
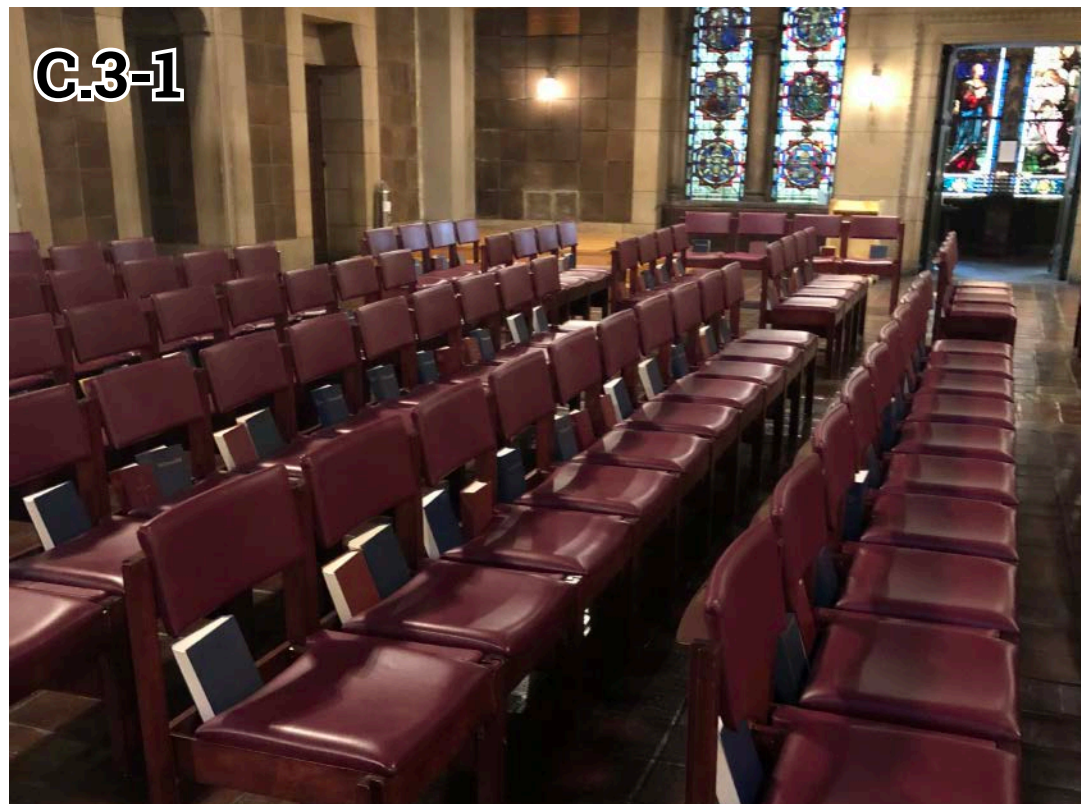
- Problems include corrosion buildup, restricted flow/pressure, and leaking.

#### C.2-2 Steam PRVs

- Non-Central
- Systems are compromised by aging condensate return piping and vacuum pumps.

### Other Plumbing Systems in Need of Repair

- Sewage Ejector Pump
- Humidification System
- Hot Water Storage Tank



### Environmental Lighting

#### C.3-1 Naive Seating

- Insufficient Lighting

#### C.3-2 North Transept

- The painting on the upper wall of the north transept wing is currently not specifically illuminated.

### Other Unsatisfactory Environmental Lighting

- Crossing Dome
- Apse Dome and Arches
- Clerestory Gallery Arches and Windows
- Side Aisle Walls

# Interior Observations

## MEP Systems



### Electrical

#### C.4-1 Electrical System

- Outdated distribution panels, risers, and branch circuiting.

#### C.4-2 Electrical System

- Community House electrical distributed from church.
- Sub-metering to monitor Sub-tenant usage is not available.
- Branch circuit wiring, distribution panels, and devices are antiquated and in need of upgrades.



### Air Conditioning

#### C.5-1 In Wall A/C System

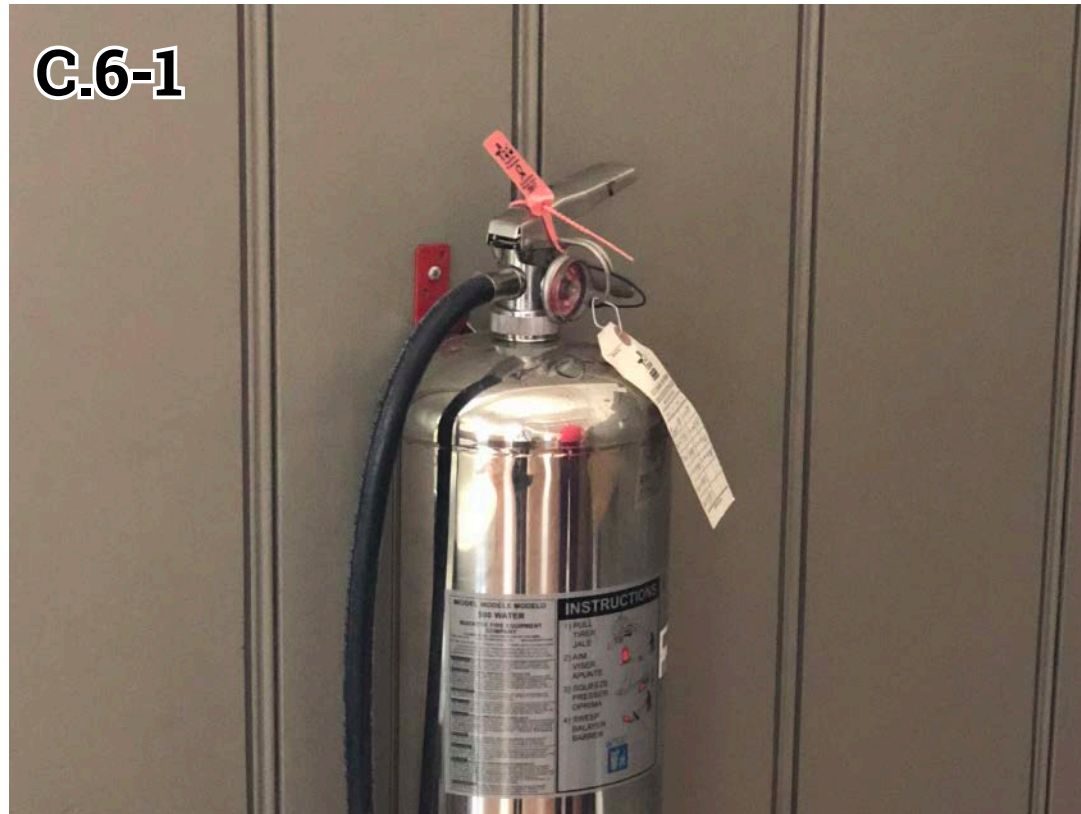
- All offices, classrooms, meeting spaces, and other program spaces are served by local window A/C units in Community House.

#### C.5-2 Egress Shaft Air Intake

- Process air for cooling tower operation requires air volume from egress stair.

# Interior Observations

## MEP Systems



C.6-1



C.6-2

## Fire Detection and Protection

### C.6-1 Community House Fire Extinguisher



- Fire detection system consisting of strobes, pull stations, and fire extinguishers in Community House

### C.6-2 Pull Station



- The community house does not have a water sprinkler system.



C.7-1



C.7-2

## Water Service

### C.7-1 Exposed PRV



- Non-Central
- Systems are compromised by aging condensate return piping and vacuum pumps.

### C.7-2 Deteriorated Pool Pump



- The community house and church feature deteriorating water service equipment.