COMMISSION OF ARCHITECTURAL REVIEW
APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

PROPERTY (location of work)

Address 503 Stuart Circle

Historic district Monument Avenue OHD

Date/time rec'd: _____
Rec'd by: _____
Application #: _____
Hearing date: _____

APPLICANT INFORMATION

Name Jeffrey W. Jacobs, Trustee

Phone 202-361-9887

Company St. John's United Church of Christ

Email jwjacobs9@gmail.com

Mailing Address 503 Stuart Circle, Richmond, VA 23220

Applicant Type: ☐ Owner ☐ Agent
☐ Lessee ☐ Architect ☐ Contractor
■ Other (please specify): church trustee

OWNER INFORMATION (if different from above)

Name

Company

Mailing Address

Phone

Email

PROJECT INFORMATION

Review Type: ☐ Conceptual Review ☐ Final Review

Project Type: ■ Alteration ☐ Demolition ☐ New Construction (Conceptual Review Required)

Project Description: (attach additional sheets if needed)

The church renovation includes the several exterior alterations, described on the next page and on several attachments:

ACKNOWLEDGEMENT OF RESPONSIBILITY

Compliance: If granted, you agree to comply with all conditions of the certificate of appropriateness (COA). Revisions to approved work require staff review and may require a new application and approval from the Commission of Architectural Review (CAR). Failure to comply with the COA may result in project delays or legal action. The COA is valid for one (1) year and may be extended for an additional year, upon written request.

Requirements: A complete application includes all applicable information requested on checklists to provide a complete and accurate description of existing and proposed conditions. Applicants proposing major new construction, including additions, should meet with Staff to review the application and requirements prior to submitting an application. Owner contact information and signature is required. Late or incomplete applications will not be considered.

Zoning Requirements: Prior to Commission review, it is the responsibility of the applicant to determine if zoning approval is required and application materials should be prepared in compliance with zoning.

Signature of Owner Jeffrey W. Jacobs Date 8/26/2020

CAR Application for Certificate of Appropriateness
St. John's United Church of Christ
203 Stuart Circle
Monument Avenue OHD
Project Description:

The following are components of the proposed exterior renovations:

1. Removal of mechanical platform: The mechanical platform and equipment on the small flat roofed rear addition have been removed (Photo B).
2. Chiller and enclosure: A new chiller, with a gated 15' x 15' wood fence enclosure will be installed on the small paved parking area set back from the alley at the rear of the church. The fence enclosure will be 8'-4" tall and constructed with 1x6 wood planks with a 2x6 cap. The fence will be finished with a solid-body stain to blend with the exterior of the adjacent church building (see Sketch, details on A2, Photos B, C, D, E).
3. Condenser: As part of the HVAC upgrades the church will add a small condenser next to the east wall, and next to a tertiary stair. This unit will be minimally visible from public rights of way. It will be screened by landscaping. (see Sketch, A2, Photos F, G)
4. Replacement of window AC Units: As part of HVAC upgrades the church would like to replace 12 window AC Units with window-mounted heat pumps roughly the same size. Three of the units are in window wells below grade along the alley, and the others are along the alley and at the rear (A1, A2, A3, Photos H, I).
5. Side entry railing: To improve safety and access to the church, the single railing centered on the stairs leading to the Lombardy Street entry to the Parish Hall will be replaced with two side railings of almost identical design. The center railing obstructs entry from the paired doors and creates a hazard due to the lack of a stair landing. (Product sheet, Photos J, K)
6. Elevator access railing: To improve safety and access to the church, a single 10' long, 2" diameter, painted pipe railing will be mounted on the sidewalk leading to the elevator entry at the rear of the Parish Hall. (A2, Photo I)
7. Stained glass protection: The yellowing acrylic that protects the stained glass in the sanctuary will be replaced with clear Lexan, acrylic, or tempered glass sheets with prefinished metal framing that aligns with the window subdivisions and matches the frame color. A copy of the proposal is attached. (Photos A, D, F, and G)
8. Masonry cleaning: the stone façade will be cleaned in accordance with NPS Preservation Brief 2, using the gentlest means possible. The cleaning will be completed only after a sample cleaning patch has been installed for review and approval by CAR staff and a DHR reviewer. The chemical proposed for use is a 50% sodium hypochlorite solution mixed with a product called "Cling-On", which keeps the solution on the stone for the dwell time required to achieve the desired result. The chemical is rinsed with a low-pressure wash of warm water.
9. Rear door awning: A simple fabric awning (5' deep, with a single slope) will be installed over the rear door as shown on the attached plan. The awning color will be either blue and white striped or solid to match the color of the adjacent wall. Product sheet is attached. We will submit swatches to the CAR secretary for final approval.

Please note: The applicant is in the process of applying for state historic tax credits.

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020

A. Front (west) elevation

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020

B. Rear elevation, church on L, school on R

C. View east along alley

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020

D. View of rear elevation with chiller (not final location)

E. View west along alley

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020

F. View of east side from W Franklin St

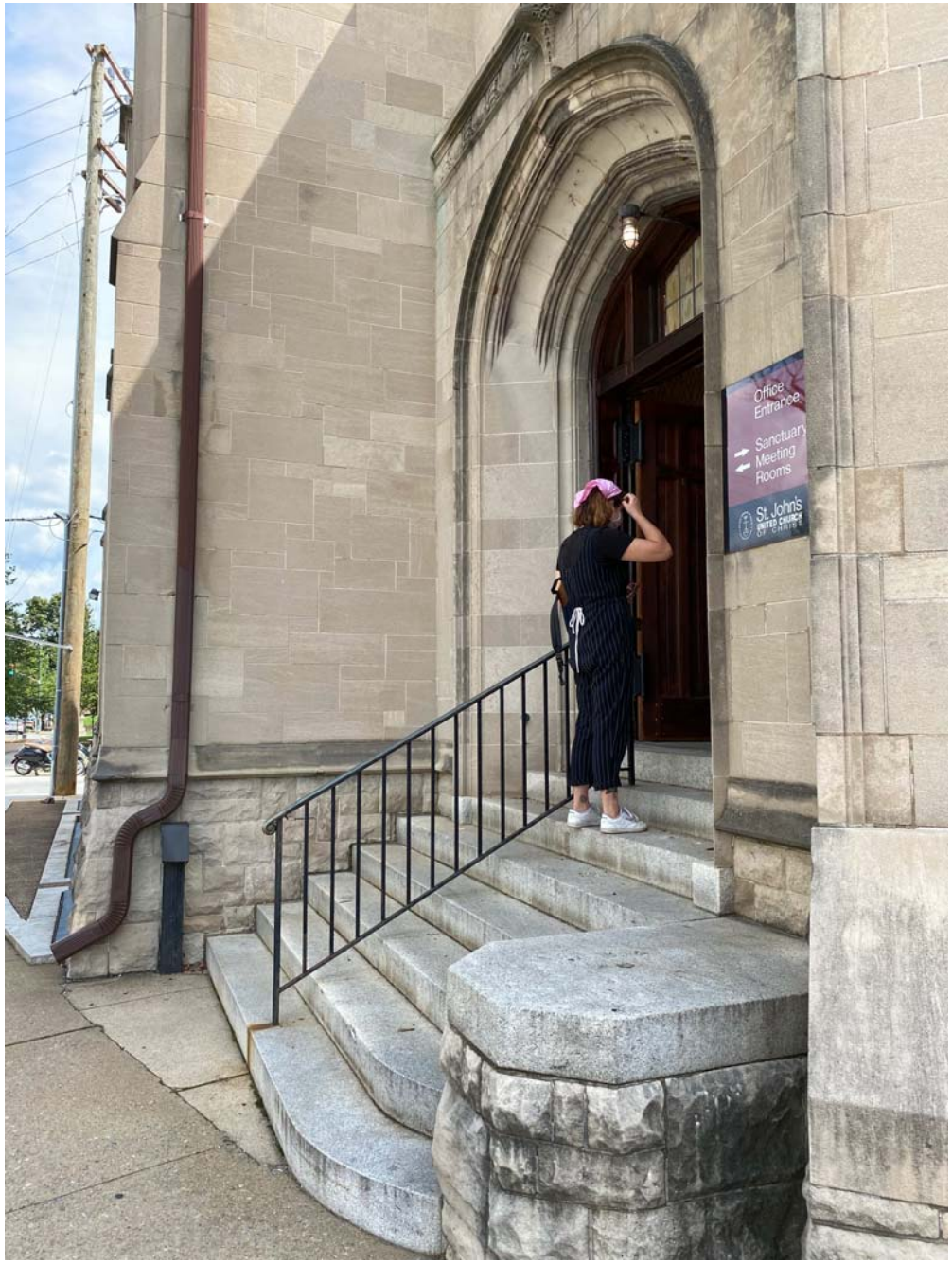
G. Detail with future CU location

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020

H. Rear wing with 2 ACUs to be replaced

I. Alley view showing ACUs to be replaced (2 are missing)

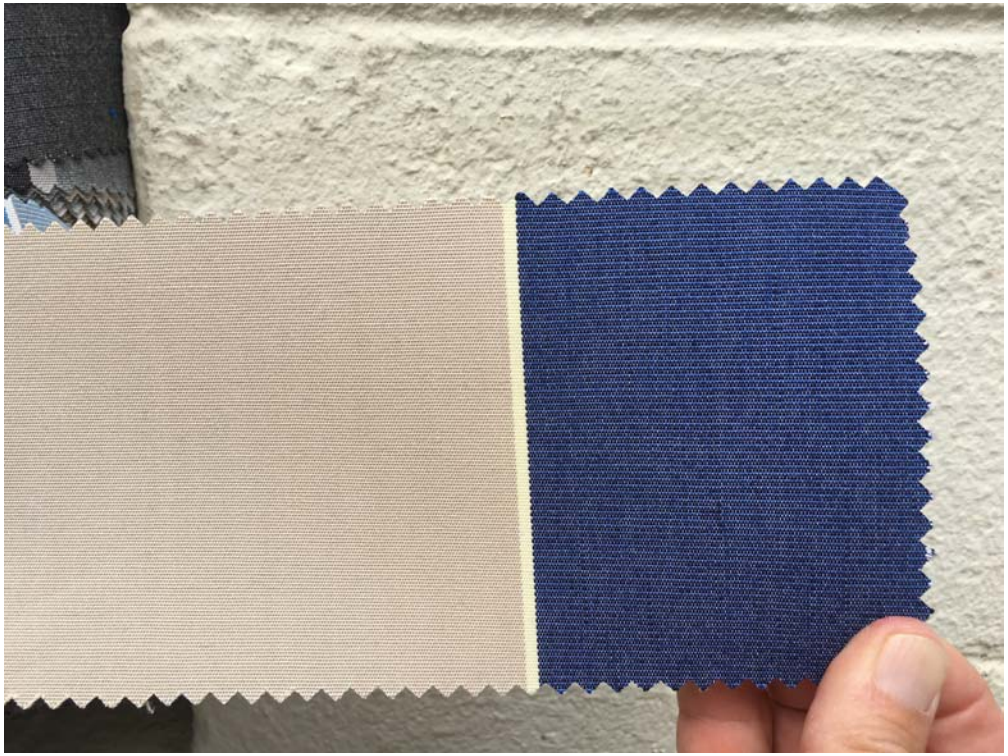
St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application 08/28/2020



J. Side entry with center rail

K. Side entry with center rail (no landing)

St. John's UCC
503 Stuart Circle, Richmond, VA
CAR Application - Awning Alternatives



Awning fabric 1st choice

Awning fabric 2nd choice

WATKINS AWNINGS

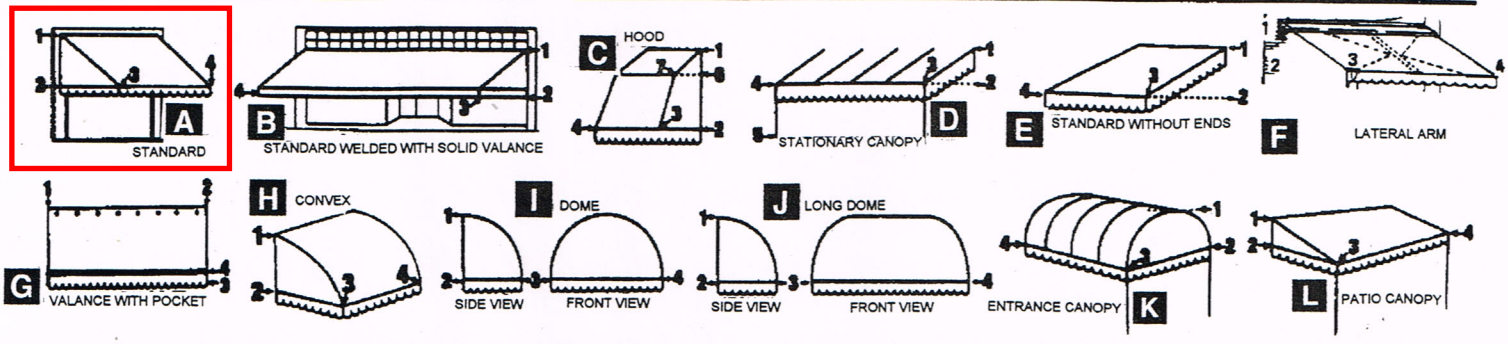
1200 DOVER CREEK LANE • MANAKIN SABOT, VA • 23103

804-281-7888 757-229-0101 540-371-5007

Order Date: 8/18/20

PURCHASER'S NAME St. John's United Church of Christ
BILLING ADDRESS 503 Stuart Circle
CITY Richmond STATE VA ZIP 23220
PHONE 202-361-9887 Jeff Jacobs

DESTINATION
NAME
ADDRESS
CITY STATE ZIP
PHONE



LOCATION	TYPE	1 TO 2	2 TO 3	1 TO 3	3 TO 4	1 TO 6	6 TO 7	QUAN.
Rear Entrance	A	2'6"	5'		13'9"			1

- [x] COMPLETE
- [ ] RECOVER
- [ ] WELDED FRAME
- [x] PIPE FRAME
- [ ] N F
- [ ] BENT
- [x] LACE
- [ ] POCKETS
- [x] HR
- [ ] 777
- [x] TRACK
- [x] STAT
- [ ] PULL-UP
- [ ] RETRACT
- [ ] POSTS
- [ ] OTHER
- [ ] STAPLE
- [ ] GRAPHICS No
- [x] BRICK
- [ ] WOOD
- [ ] _____

SPECIAL INSTRUCTIONS:

Furnish & install a new complete traditional awning frame & cover.

THREAD COLOR
HANG HEIGHT 13'9"
BINDING - WHITE OR
VALANCE LENGTH 6"
- [ ] OTHER
- [ ] OLD
- [ ] ST. HEM
- [ ] NEW

VALANCE
- [ ] RIGID
- [x] FREE HANGING

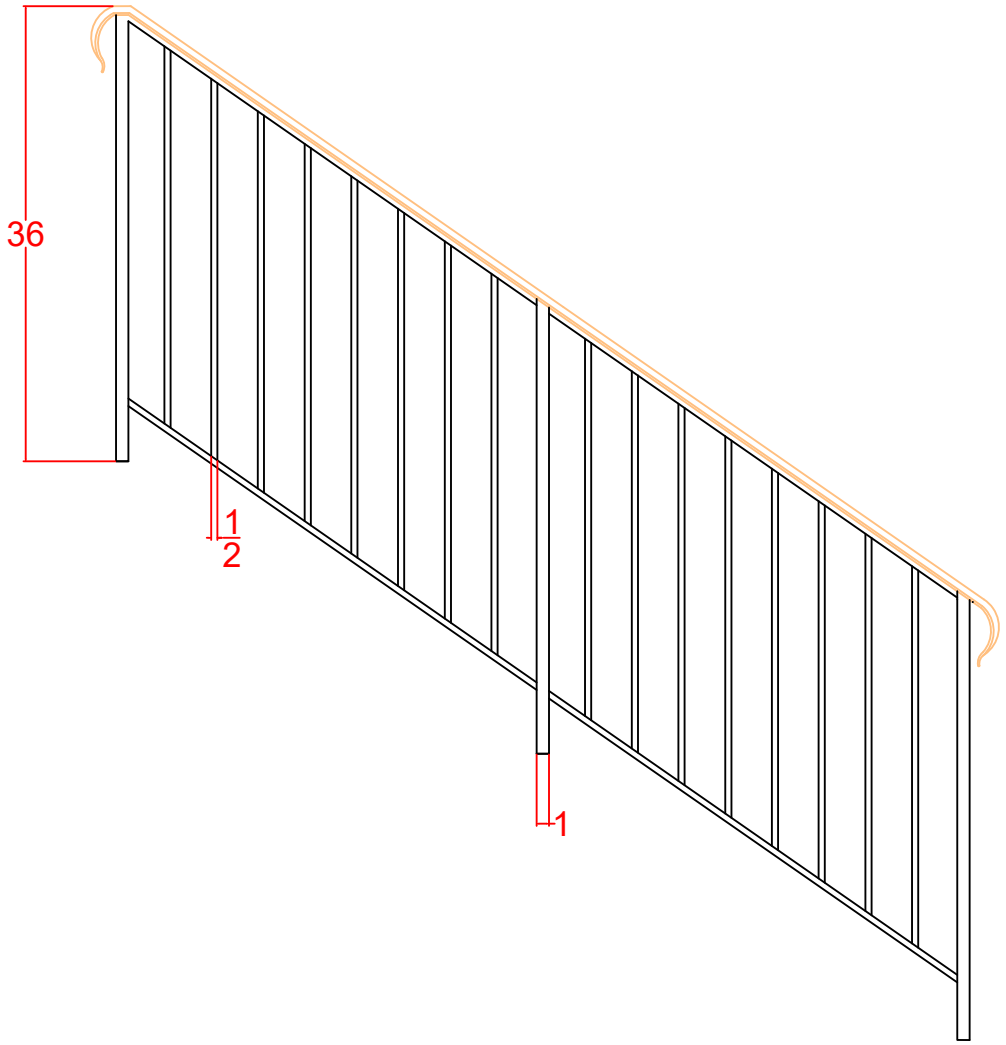
FABRIC Sunbrella
YARDS

PURCHASER'S SIGNATURE

SALESPERSON'S SIGNATURE John Watkins

TOTAL	$ 2,430.00
DEPOSIT	$ 1,215.00
BALANCE	$ 1,215.00

With your acceptance of this sales order, parties are bound by the provisions of the terms and conditions of agreement summarized on reverse side of this sales order. If required, engineering and/or permits are the responsibility of the owner.



Posts = 1" solid square bar ,Carbon Steel

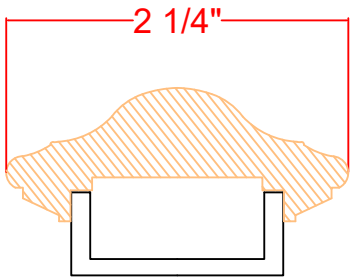
Toprail = 2 ¼" solid molded topbar mounted on an 1" by ½" channel, ⅛" wall thickness, Bronze topbar, Steel Channel, 36" set height

Bottomrail = 1" by ½" channel, ⅛ wall thickness, Carbon Steel

Pickets = ½" solid square bars, 3 ⅞" max clear, Carbon Steel

Finish = #4 Brushed bronze topbar and #41 Black Powdercoated frame.

Installation = 4" embedment depth for each post. Secured with non shrink grout in 2" Dia. holes.



Top Rail Profile

Project Name / Address	Materials
St. Johns United Church of Christ	Brushed bronze top rail, Steel frame

Greendale Railing
2031 WestWood Ave.
Richmond, VA 23230
(804) 266 2664

Lynchburg Stained Glass

June 26, 2020

Mr. Richard Bighinattri
St John United Church of God
503 Stuart Circle
Richmond, VA 23220

Mr. Bighinattri,

Thank you for inviting Lynchburg Stained Glass to survey the beautiful stained glass windows and storm covering of St John United Church of God. We are pleased to present this assessment and proposal for your consideration.

Overall, the stained glass windows at St John are in very good condition. The stained glass panels appear to be flat, secure in the frame and well braced.

- There are no areas of concern in the large front window.
- Two northwest clear story windows have minor bowing which was pointed out during the survey. These 2 windows should be monitored but no work is required at this time.
- The stained glass within the circle window above the altar appears stable however the frame is bowed inward at center. I suggest that we take a closer look at the frame from the exterior while we have a lift on site for the clerestory covering efforts. We will provide a recommendation and proposal for the repair/replacement of the circle frame at that time.

This proposal does not include any work to the stained glass at this time. We have included storm covering for the large front window, 3 southeast clerestory windows, and 10 southeast ground level windows.

Please let me know if you have any questions.

Best regards,

John D. Coates
Project manager

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voice: 800.237.6161 fax: 434.525.6168
www.lynchburgstainedglass.com email: info@lynchburgstainedglass.com

Lynchburg Stained Glass

Stained Glass Assessment and Restoration Recommendations

St John United Church of God, Richmond, VA
Date of Assessment: May 2020

Observations

Lynchburg Stained Glass recently visited St John United Church of God to survey their many beautiful stained glass windows and to offer restoration and protective covering recommendations.

- Currently the windows are un-vented which traps heat and moisture between the existing storm covering and the stained glass. Replacement storm covering will include vents to allow the space between the storm covering and the stained glass to "breathe": reducing trapped heat and moisture.

- Only 2 stained glass windows surveyed (northwest clerestory windows) exhibit notable out-of-plane bowing. Bowing is not significate enough to merit removal and re-lead at this time. The windows should be monitored for signs of further distress. Future observations of 1) exposed edges of glass and 2) daylight visible between glass and lead would both be signs that the windows require restoration.

- The circle window above the altar has a significant bow in the frame. We recommend that the window frame be inspected from the exterior (temporarily removing a portion of the existing covering) while a mechanical lift is on site for the proposed clerestory covering work. Otherwise the stained glass appears to be in stable condition.

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Lynchburg Stained Glass

Window list for exterior painting and storm covering

		Recommendation
A	Large Front Window, Qty (1)	
	152" x 230" Stained Glass Window	Replace storm covering
B	Large Southwest Clerestory Windows, Qty (4)	
	88" x 176" Stained Glass Window	Replace storm covering
C	Lower Southeast Main Level, Qty (8)	
	31" x 55" Stained Glass Window	Replace storm covering
D	Lower Southwest Main Level, Qty (2)	
	40" x 71" Stained Glass Window	Replace storm covering

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Lynchburg Stained Glass

Scope of Work for Option 1: New Storm Coverings w/ Vented Aluminum Frame

The base price includes exterior painting and storm covering for the upper windows A and B (5 windows total).

The existing polycarbonate storm covering will be removed and discarded. A new vented storm system will be installed over the exterior of the stained glass windows. The new storm system consists of a vented aluminum frame and 1/4-inch clear tempered safety glass. An option is provided to upgrade the glazing to laminated safety glass. The frame will be colored beige to compliment the color of the existing window frames.

Architectural glazing tape and neoprene setting blocks will be used to install the clear storm covering into the frame. The storm covering will be caulked into the frame with silicone caulk. The frame will be caulked to the masonry jamb with urethane caulk matching the frame color.

Venting will be accomplished thru the aluminum frame. All vent slots will have heavy gage bug screens. A frame sample has been provided.

An option is provided for adding storm covering at 10 lower windows, C and D. If accepted, the existing wood sill which supports the current storm covering will be removed. The frames will be scraped, caulked and painted. The vented new storm system will be installed to extent down to the existing masonry sill and will accommodate the sill slope.

An option is also provided for upgrading the glazing to clear laminated safety glass. Lami is 99% UV resistant thus helping to protect the paint which is behind the storm covering. Lami is also more protective than tempered glass because it holds together if broken. Both laminated safety glass and tempered safety glass are excellent covering materials.

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Window B - Panel configuration and support for new tempered glass option.

Framing bending diagram and vent locations.

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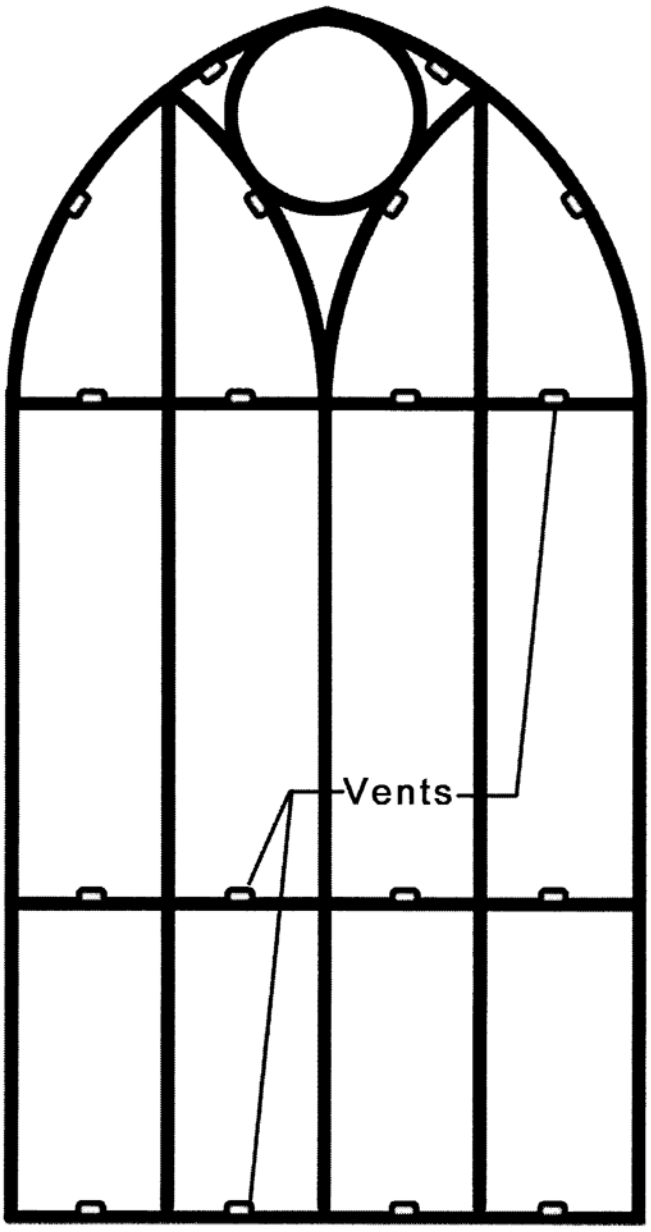

Window A – Panel configuration and support for new tempered glass option.

Framing bending diagram and vent locations.

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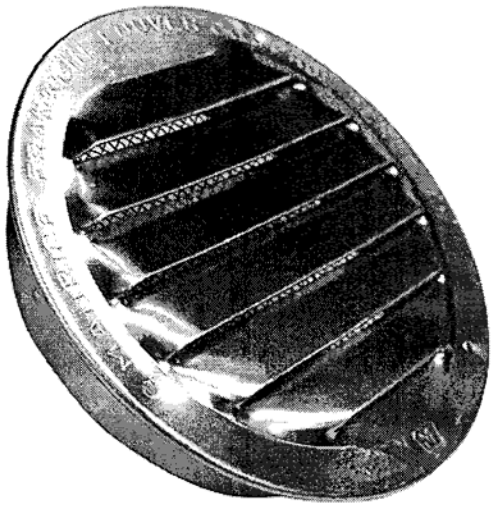
Scope of Work for Option 2: New Lexan Storm Coverings, no vented frame.

Includes exterior painting and storm covering for all 15 windows A, B, C and D.

The existing polycarbonate storm covering will be removed and discarded. New Lexan storm system will be installed over the exterior of the stained glass windows. The panel configuration and support method will be the same as the existing condition. Venting will be accomplished with small 1.5" diameter louvered aluminum vents drilled into the Lexan at the top and bottom of each window.

Lower 10 windows (C and D): storm covering will terminate at the wood sill same as existing.



1.5" diameter Aluminum Vent

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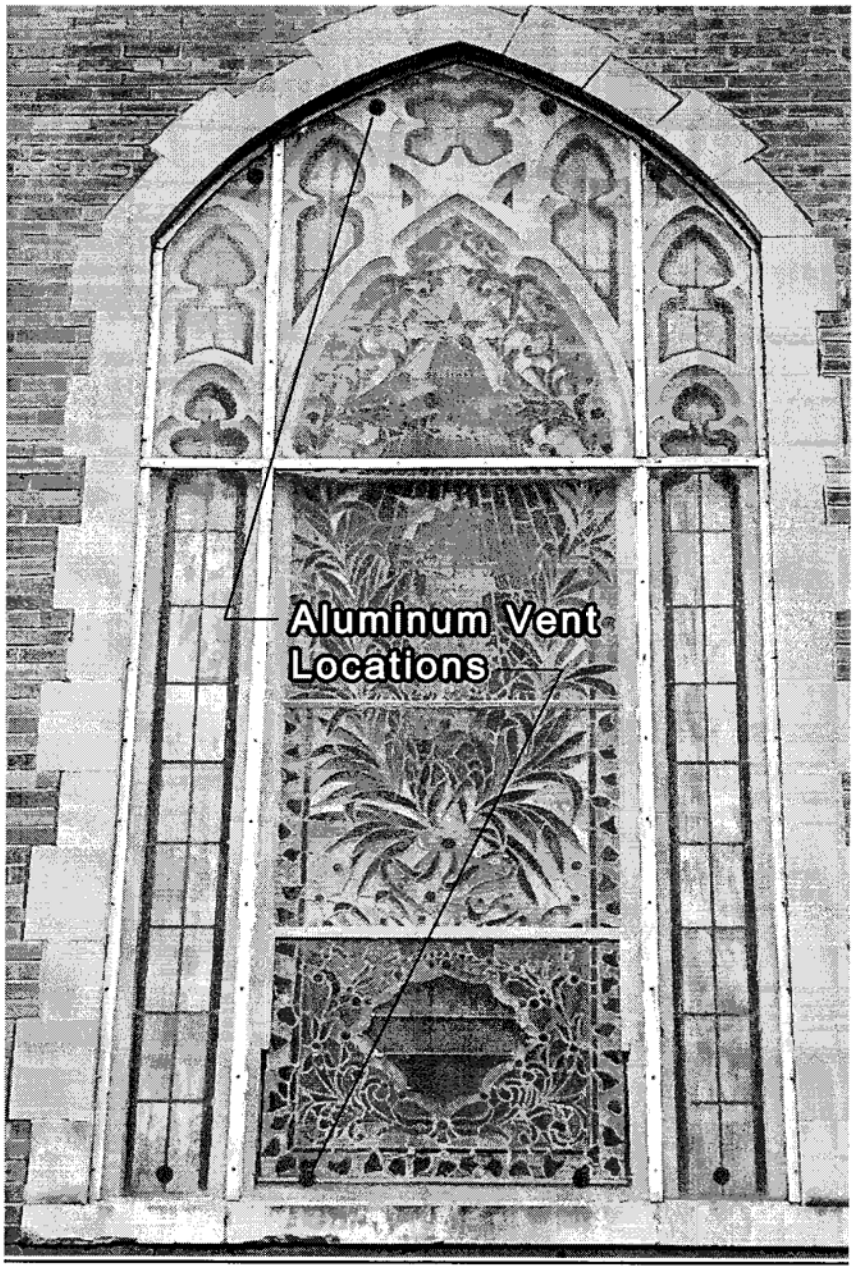

Panel configuration and support for new Lexan option.

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Lynchburg Stained Glass

General Conditions

Rotten Wood: This proposal does not include the repair of rotten wood. If discovered, rotten wood will be repaired at the cost of labor and materials plus 30% and added to the contract.

Putty glazing of stained glass into frame: This applies to both option 1 and 2.
This proposal includes an allowance for the repair of 100 linear feet of putty glazing. Additional putty glazing will be repaired as necessary at the cost of $10 per linear foot and added to the contract. The maximum addition to replace all of the exterior putty glazing at the 4 type B windows would be $1600.

Painting: Frames will be scraped of loose paint and joints will be re-caulked. Frames will be painted 2 coats of Sherwin Williams exterior Duration latex. Color to match the existing frames. Painting will be by a commercial paint contractor and subcontracted by Lynchburg Stained Glass.

Scaffolding: Lynchburg Stained Glass will provide access to the windows as needed to perform the work. Access will be a combination of OSHA compliant scaffold and mechanical lift equipment.

Insurance: Lynchburg Stained Glass will furnish all liability, property and worker's compensation insurance necessary to complete this project. A certificate of insurance has been provided to the church. The church will be notified directly by out insurance carrier in the event that this coverage is modified during the course of this project.

Repair of damage caused by LSG during the work: LSG will repair damage to the existing church which occurs as a result of the work as detailed herein.

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Lynchburg Stained Glass

Warranty: Lynchburg Stained Glass will provide a written 10-year warranty for workmanship and materials. Warranty of covering materials against discoloration is limited to that provided by the manufacturer and is limited to material only, not inclusive of labor.

Permits: Permits and sidewalk closure are the responsibility of the church, if required.

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Lynchburg Stained Glass

Cost Summary for Option 1, New Storm Coverings w/ Vented Aluminum Frame

Option 1: Total base cost for scope of work as defined herein:$69,645

Includes large front window type A and 4 clerestory windows type B.

Option 1A:

Upgrade clear glazing from tempered safety glass to clear laminated safety glass at window types A and B: $2,975

_____ initial to accept

Option 1B:

Add 10 lower windows type C and D. Windows to receive vented aluminum frame and tempered safety glass: $10,520

_____ initial to accept

Option 1C:

Upgrade clear glazing from tempered safety glass to clear laminated safety glass at window types C and D: $680

_____ initial to accept

Payment Terms:

1/3 down payment, 1/3 when frames are 100% fabricated, 1/3 balance upon completion.

Lynchburg stained Glass will furnish all liability, property and worker's compensation insurance necessary to complete this project. This proposal is valid for 90 days.

John D Carter

Submitted for **Lynchburg Stained Glass, June 26, 2020**

_____

Accepted by St John United Church of God by Date

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Lynchburg Stained Glass

Cost Summary for Option 2, New Storm Coverings w/ Vented Aluminum Frame

Option 2: Lexan storm covering at all 14 windows A, B, C, and D. No vented aluminum frames. Installation similar to existing condition (same panel configuration). Includes rounds louvered vents installed into Lexan.

Includes exterior painting: $70,500

Payment Terms:

1/3 down payment
1/3 when painting is complete
1/3 balance upon completion

Lynchburg stained Glass will furnish all liability, property and worker's compensation insurance necessary to complete this project. This proposal is valid for 90 days.

Submitted for **Lynchburg Stained Glass, June 26, 2020**

Accepted by St John United Church of God by Date

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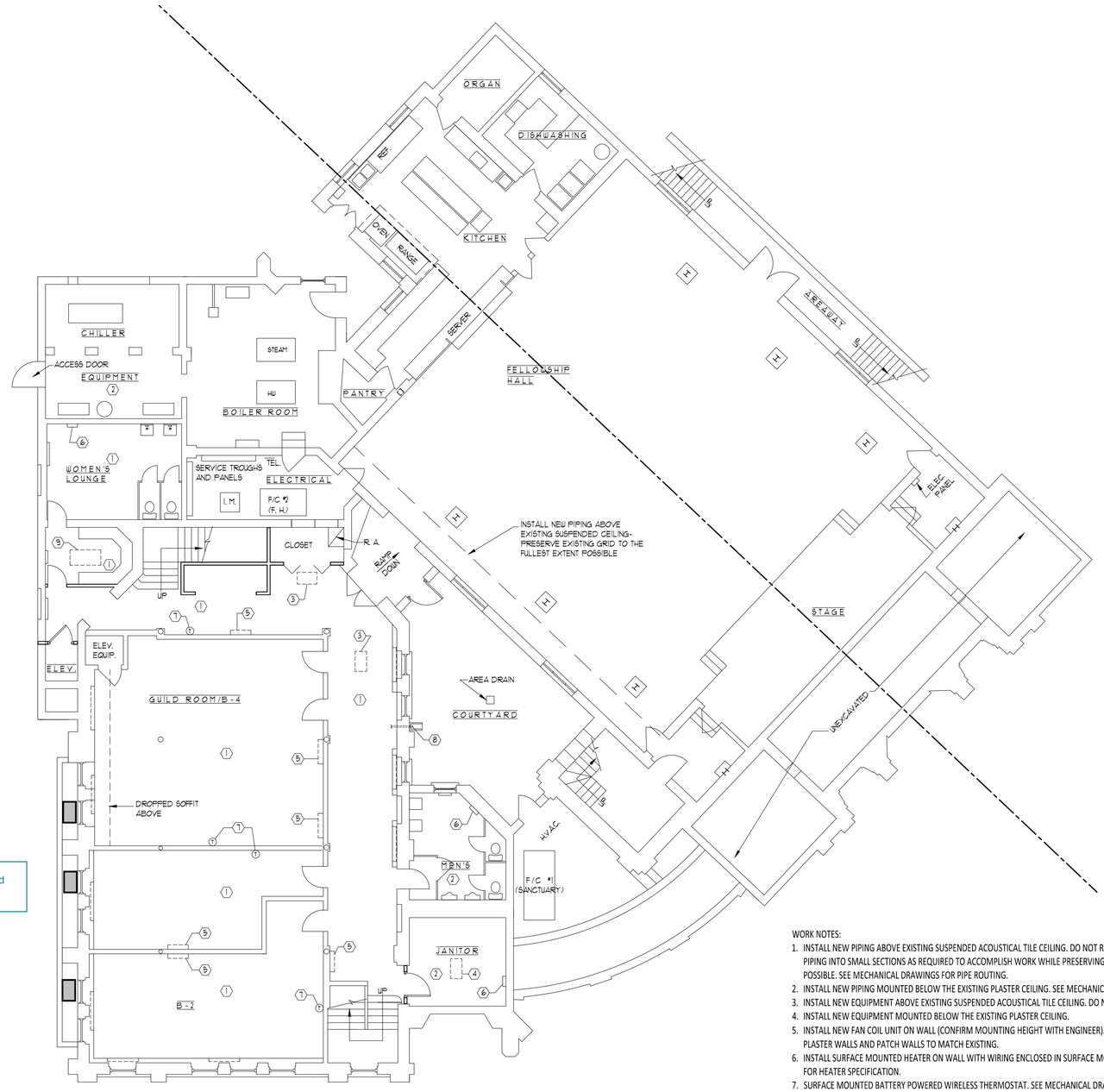


4. Window ACUs to be replaced with same-sized window heat pump units below grade

WORK NOTES:

1. INSTALL NEW PIPING ABOVE EXISTING SUSPENDED ACOUSTICAL TILE CEILING. DO NOT REMOVE EXISTING CEILING GRID - DIVIDE INSTALLATION OF PIPING INTO SMALL SECTIONS AS REQUIRED TO ACCOMPLISH WORK WHILE PRESERVING THE EXISTING CEILING GRID TO THE FULLEST EXTENT POSSIBLE. SEE MECHANICAL DRAWINGS FOR PIPE ROUTING.
2. INSTALL NEW PIPING MOUNTED BELOW THE EXISTING PLASTER CEILING. SEE MECHANICAL DRAWINGS FOR PIPE ROUTING.
3. INSTALL NEW EQUIPMENT ABOVE EXISTING SUSPENDED ACOUSTICAL TILE CEILING. DO NOT REMOVE EXISTING CEILING GRID.
4. INSTALL NEW EQUIPMENT MOUNTED BELOW THE EXISTING PLASTER CEILING.
5. INSTALL NEW FAN COIL UNIT ON WALL (CONFIRM MOUNTING HEIGHT WITH ENGINEER). INSTALL WIRING AND PIPING CONCEALED IN EXISTING PLASTER WALLS AND PATCH WALLS TO MATCH EXISTING.
6. INSTALL SURFACE MOUNTED HEATER ON WALL WITH WIRING ENCLOSED IN SURFACE MOUNTED WIRE MOLDING. SEE MECHANICAL DRAWINGS FOR HEATER SPECIFICATION.
7. SURFACE MOUNTED BATTERY POWERED WIRELESS THERMOSTAT. SEE MECHANICAL DRAWINGS FOR THERMOSTAT SPECIFICATION.
8. CONDENSATE DRAIN THROUGH WALL. SEE MECHANICAL DRAWINGS FOR DETAIL. PROVIDE SPLASH BLOCK.
9. NEW HEAT PANEL INSTALLED IN EXISTING ACOUSTICAL TILE CEILING. SEE MECHANICAL DRAWINGS FOR HEATER SPECIFICATION.

1/A1 BASEMENT PLAN

1/8" = 1'-0"

SEE MECHANICAL PLANS TO CONFIRM LOCATIONS FOR ALL HVAC EQUIPMENT AND THERMOSTATS

COMMONWEALTH OF VIRGINIA
JOHN TERRY COX
Lic. No. 3283
ARCHITECT

DATE: 3/04/2020
REVISIONS:

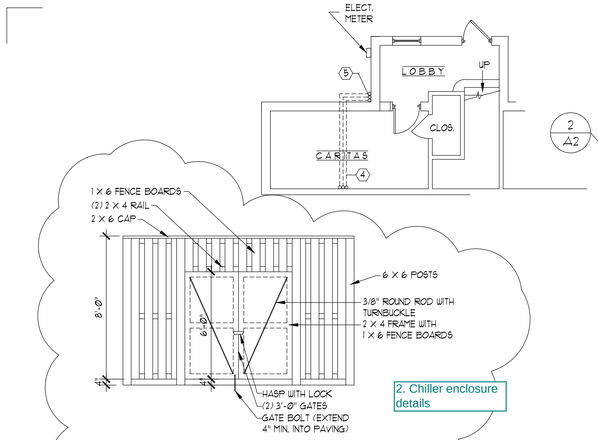
DRWN: BH APPD: WL

JT COX & ASSOCIATES ARCHITECTS, PLC
201 Hull Street, Suite B
Richmond, Virginia 23224
(804) 783 - 8742

SAINT JOHN'S UNITED CHURCH OF CHRIST
HVAC RENOVATION
503 STUART CIRCLE

BASEMENT PLAN

A1

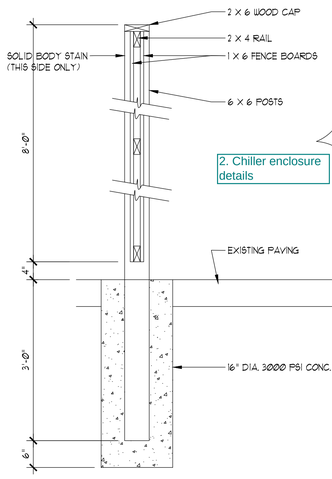


2. Chiller enclosure details

5 / A2 GATE ELEVATION

1/4" = 1'-0"

1. SOLID BODY STAIN ON ALL THREE SIDES (EXTERIOR ONLY), COLOR TO MATCH PAINTED MASONRY ON CHURCH

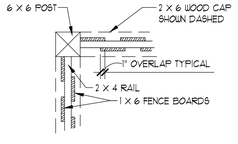


2. Chiller enclosure details

4 / A2 SECTION THRU SCREENING

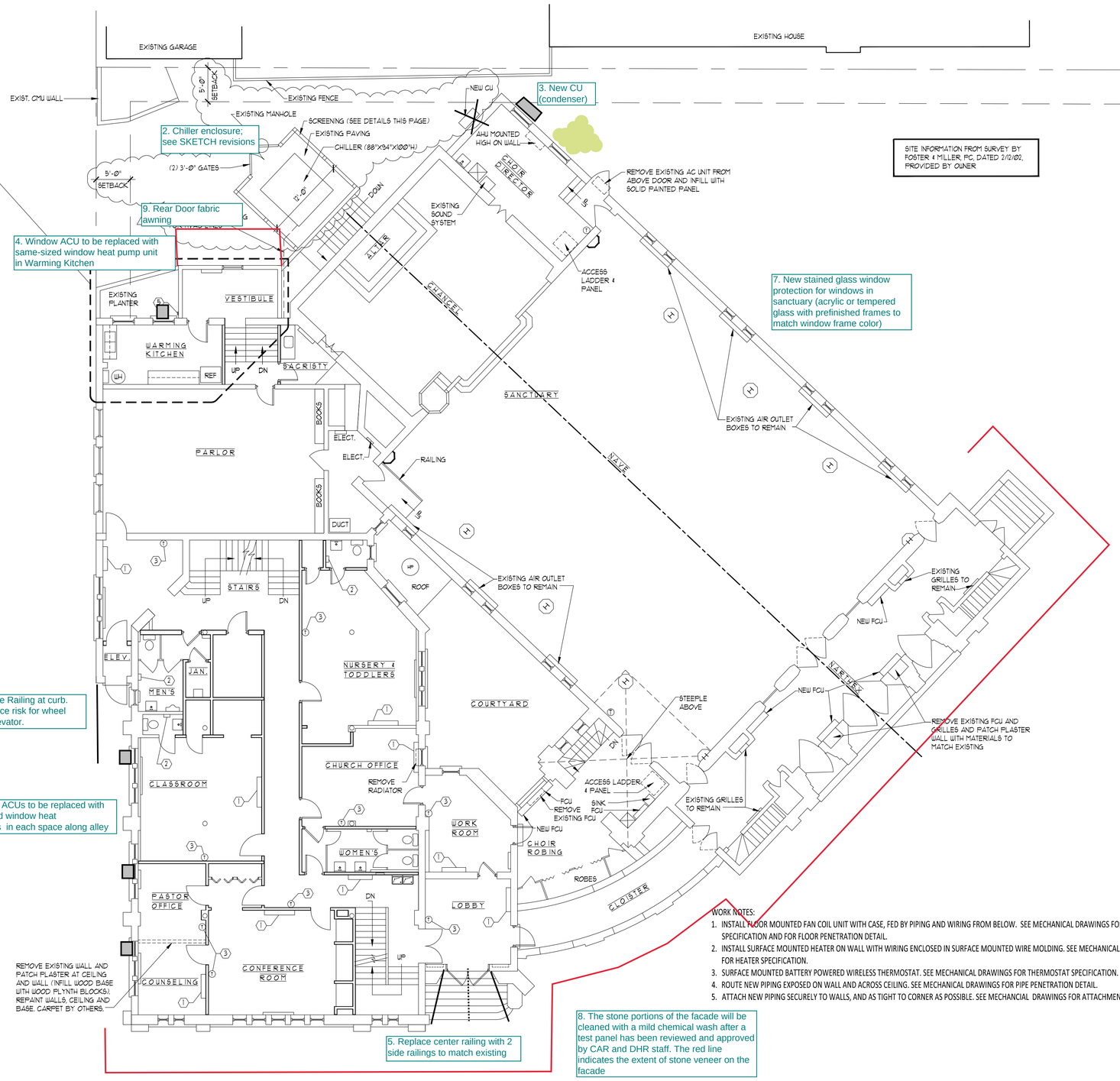
3/4" = 1'-0"

1. ALL LUMBER SHALL BE PRESSURE TREATED
2. ALL METAL (INCLUDING HARDWARE, NAILS, SCREWS AND OTHER CONNECTORS) SHALL BE GALVANIZED OR STAINLESS



3 / A2 PLAN VIEW OF SCREENING

3/4" = 1'-0"



2. Chiller enclosure; see SKETCH revisions

3. New CU (condenser)

4. Window ACU to be replaced with same-sized window heat pump unit in Warming Kitchen

9. Rear Door fabric awning

7. New stained glass window protection for windows in sanctuary (acrylic or tempered glass with prefinished frames to match window frame color)

6. 2" Diameter Pipe Railing at curb. 10 ft long. To reduce risk for wheel chair access to elevator.

4. Window ACUs to be replaced with same-sized window heat pump units in each space along alley

5. Replace center railing with 2 side railings to match existing

8. The stone portions of the facade will be cleaned with a mild chemical wash after a test panel has been reviewed and approved by CAR and DHR staff. The red line indicates the extent of stone veneer on the facade

SITE INFORMATION FROM SURVEY BY FOSTER & MILLER, PC, DATED 2/12/20, PROVIDED BY OWNER

WORK NOTES:
1. INSTALL FLOOR MOUNTED FAN COIL UNIT WITH CASE, FED BY PIPING AND WIRING FROM BELOW. SEE MECHANICAL DRAWINGS FOR EQUIPMENT SPECIFICATION AND FOR FLOOR PENETRATION DETAIL.
2. INSTALL SURFACE MOUNTED HEATER ON WALL WITH WIRING ENCLOSED IN SURFACE MOUNTED WIRE MOLDING. SEE MECHANICAL DRAWINGS FOR HEATER SPECIFICATION.
3. SURFACE MOUNTED BATTERY POWERED WIRELESS THERMOSTAT. SEE MECHANICAL DRAWINGS FOR THERMOSTAT SPECIFICATION.
4. ROUTE NEW PIPING EXPOSED ON WALL AND ACROSS CEILING. SEE MECHANICAL DRAWINGS FOR PIPE PENETRATION DETAIL.
5. ATTACH NEW PIPING SECURELY TO WALLS, AND AS TIGHT TO CORNER AS POSSIBLE. SEE MECHANICAL DRAWINGS FOR ATTACHMENT DETAILS.

1 / A2 FIRST FLOOR PLAN

1/8" = 1'-0"

SEE MECHANICAL PLANS TO CONFIRM LOCATIONS FOR ALL HVAC EQUIPMENT AND THERMOSTATS

COMMONWEALTH OF VIRGINIA
JOHN TERRY COX
Lic. No. 3283
ARCHITECT

DATE: 3/04/2020
REVISIONS:
4-20-2020

DRWN: BH APPD: WL

JT COX & ASSOCIATES ARCHITECTS, PLC
201 Hull Street, Suite B
Richmond, Virginia 23224
(804) 783 - 8742

SAINT JOHN'S UNITED CHURCH OF CHRIST
HVAC RENOVATION
503 STUART CIRCLE

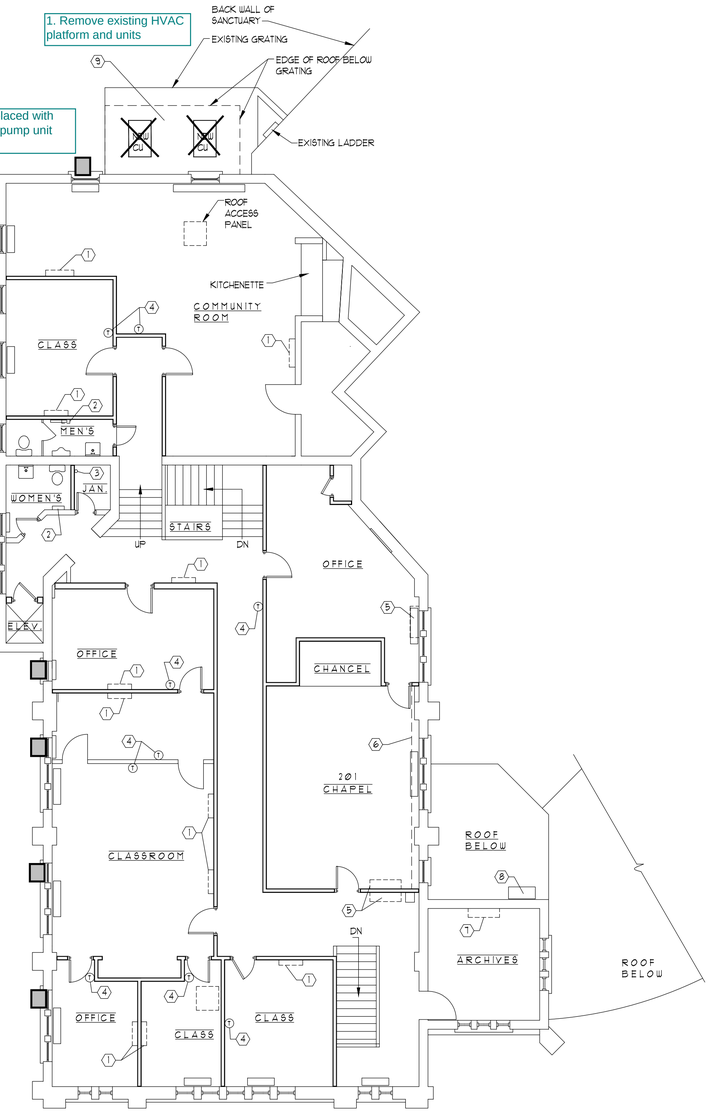
FIRST FLOOR PLAN

A2

1. Remove existing HVAC platform and units

4. Window ACU to be replaced with same-sized window heat pump unit in Community Room

4. Window ACUs to be replaced with same-sized window heat pump units in each space along alley



WORK NOTES:

1. INSTALL NEW FAN COIL UNIT ON WALL (CONFIRM MOUNTING HEIGHT WITH MECHANICAL ENGINEER). INSTALL WIRING AND PIPING CONCEALED IN EXISTING PLASTER WALLS AND PATCH WALLS TO MATCH EXISTING. SEE MECHANICAL PLANS FOR REFRIGERANT LIQUID, REFRIGERANT SUCTION AND HOT GAS LINES IN ATTIC.
2. INSTALL SURFACE MOUNTED HEATER ON WALL WITH WIRING ENCLOSED IN SURFACE MOUNTED WIRE MOLDING. SEE MECHANICAL DRAWINGS FOR HEATER SPECIFICATION.
3. INSTALL SURFACE MOUNTED CONDENSATE LINE TO EXISTING JANITOR'S SINK. SEE MECHANICAL PLANS FOR ROUTING OF CONDENSATE LINES IN ATTIC.
4. SURFACE MOUNTED BATTERY POWERED WIRELESS THERMOSTAT. SEE MECHANICAL DRAWINGS FOR THERMOSTAT SPECIFICATION.
5. WALL MOUNTED AHU (CONFIRM MOUNTING HEIGHT WITH MECHANICAL ENGINEER) WITH SURFACE MOUNTED WIRING AND REFRIGERANT LINES CONCEALED WITH MANUFACTURER'S STANDARD COVERS.
6. ROUTE WIRING AND REFRIGERANT LINES CONCEALED IN EXISTING LIGHT COVE.
7. REMOVED EXISTING AHU AND PROVIDE NEW AS SPECIFIED.
8. REMOVED EXISTING CONDENSING UNIT AND PROVIDE NEW AS SPECIFIED, MOUNTED ON EXISTING EXTERIOR FRAME.
9. REMOVE EXISTING CHILLERS AND PROVIDE NEW CONDENSING UNITS. SANDBLAST AND REPAINT EXISTING METAL GRATING AND PROVIDE REPAIRS TO EXISTING ROOF BELOW GRATING AS NEEDED.

1/A3 SECOND FLOOR PLAN

1/8" = 1'-0"

SEE MECHANICAL PLANS TO CONFIRM LOCATIONS FOR ALL HVAC EQUIPMENT AND THERMOSTATS

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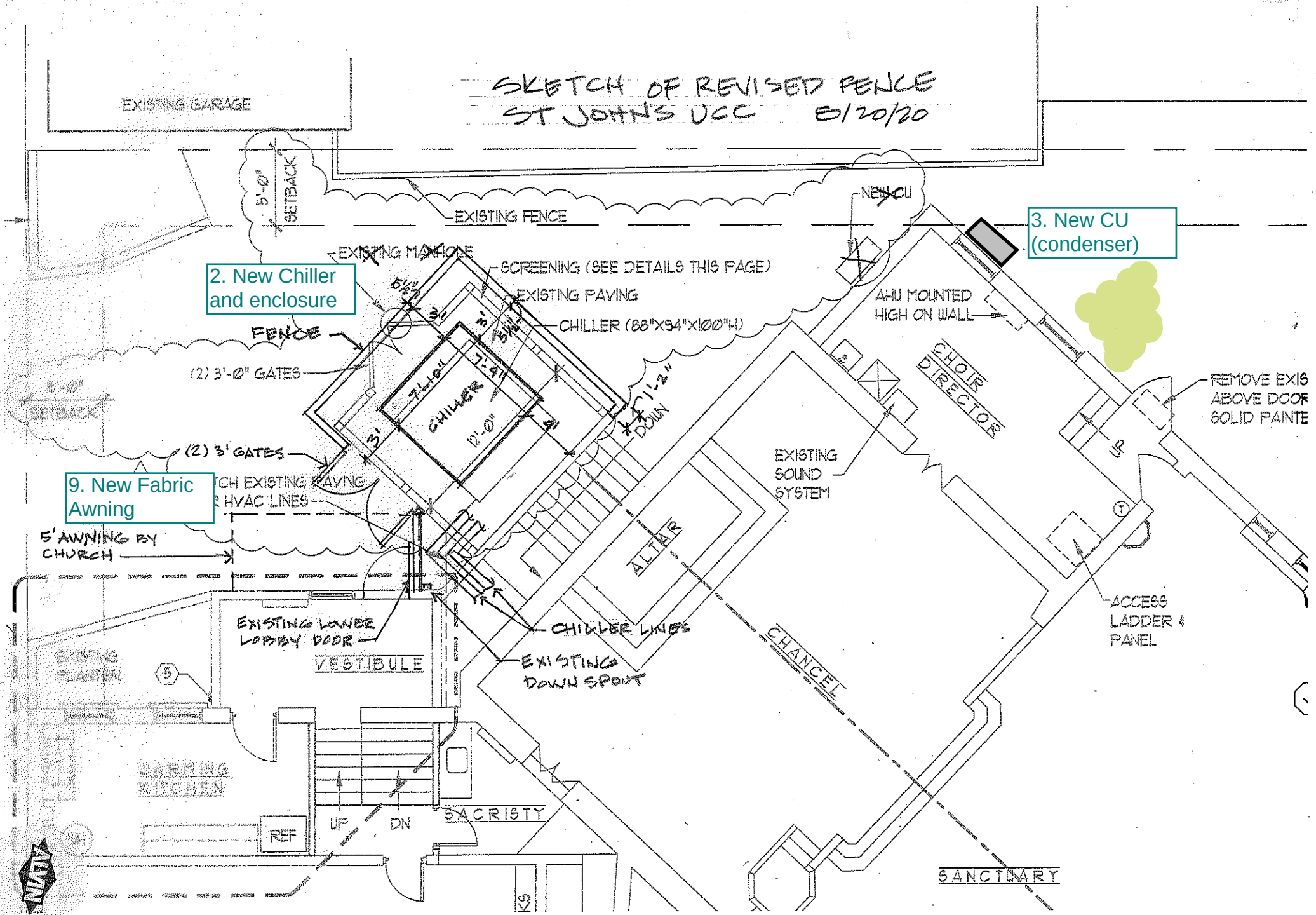
SAINT JOHN'S UNITED CHURCH OF CHRIST
HVAC RENOVATION
503 STUART CIRCLE

SECOND FLOOR PLAN

A3


SKETCH OF REVISED FENCE
ST JOHN'S UCC 8/20/20
EXISTING GARAGE
5'-0" SETBACK
EXISTING FENCE
NEW CU
3. New CU (condenser)
EXISTING MANHOLE
SCREENING (SEE DETAILS THIS PAGE)
2. New Chiller and enclosure
EXISTING PAVING
FENCE
CHILLER (88"X94"X100"H)
AHU MOUNTED HIGH ON WALL
(2) 3'-0" GATES
CHILLER
7'-4"
12'-0"
DOWN
CHOIR DIRECTOR
REMOVE EXIS ABOVE DOOR SOLID PAINTE
(2) 3' GATES
9. New Fabric Awning
EXISTING SOUND SYSTEM
5' AWNING BY CHURCH
ALTAR
EXISTING LOWER LOBBY DOOR
VESTIBULE
CHILLER LINES
EXISTING DOWN SPOUT
CHANCEL
ACCESS LADDER & PANEL
EXISTING PLANTER
WARMING KITCHEN
REF
UP
DN
SACRISTY
SANCTUARY
KS

Job Name/Location:

Date:

For: ☐ File ☐ Resubmit ☐ Approval ☐ Other

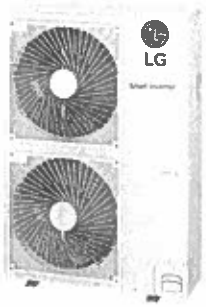
PO No.:

Architect: GC:

Engr: Mech:

Rep:

(Company) (Project Manager)



LMU360HHV
Multi F MAX with LGRED® Heat Pump Outdoor Unit

LG
Life's Good

Performance:

Cooling (Min-Rated-Max, Btu/h)	11,700~36,000~46,733
Heating (Min-Rated-Max, Btu/h)	13,455~41,000~50,200
Max Heating at 5°F (Btu/h)	41,000
Cooling Power Input (Min-Rated-Max, kW)	0.72 ~ 2.40 ~ 3.75
Heating Power Input (Min-Rated-Max, kW)	0.96 ~ 2.93 ~ 3.94

Cooling Nominal Test Conditions:
Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating Nominal Test Conditions:
Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB

Electrical:

Power Supply (V¹/Hz/Ø)	208-230/60/1
MOP (A)	45
MCA (A)	30.2
Cooling Rated Amps (A)	25.06
Heating Rated Amps (A)	25.06
Compressor (A)	20.4
Fan Motor (A)	0.73 x 2

MOP - Maximum Overcurrent Protection MCA - Minimum Circuit Ampacity

Piping:

Refrigerant Charge (lbs.)	12.34
Liquid Line (in, OD)	Ø3/8 x 1
Vapor Line (in, OD)	Ø3/4 x 1
Max Total Piping[2] (ft)	475.7
Max ODU to IDU Piping[3] (ft)	229.6
Piping Length[4] (no add'l refrigerant, ft)	147.6
Max Elevation between ODU and IDU (ft)	98.4
Max Elevation between IDU and IDU (ft)	49.2

ODU - Outdoor Unit IDU - Indoor Unit

Controls Features:

- •Auto operation
- •Auto restart
- •Defrost/Deicing
- •Inverter (variable speed compressor)
- •Low ambient operation to 14F (cooling mode)
- •Restart delay (3-minutes)
- •Self diagnosis
- •Soft start
- •Factory installed Drain Pan Heater

Optional Accessories:

- ☐ PI-485 Integration Board - PMNFP14A1
- ☐ AC Smart IV - PACS4B000
- ☐ ACP IV - PACP4B000
- ☐ Power Distribution Indicator - PQNUD1S41
- ☐ MultiSITE™ CM - PBACNBTR0A
- ☐ LonWorks® Gateway - PLNWKB100
- ☐ Y-Branch - PMBL5620
- ☐ ACP IV BACnet Gateway - PQNFB17C2
- ☐ AC Smart IV BACnet® Gateway - PBACNA000
- ☐ Low Ambient Wind Baffle (Cooling operation to -4°F) - ZLABGP04A x2

Required[5] Accessories:

- ☐ 2 Port BD Unit - PMBD3620
- ☐ 3 Port BD Unit - PMBD3630
- ☐ 4 Port BD Unit - PMBD3640
- ☐ 4 Port BD Unit - PMBD3641

Operating Range:

Cooling (°F DB)	14 to +118
Heating (°F WB)	-13 to +75

Unit Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure[3] (Cool/Heat) ±3 dB(A)	54 / 57
Net/Shipping Weight (lbs)	222.7/249.1
Heat Exchanger Coating	GoldFin™
Min Number of Indoor Units	2
Max Number of Indoor Units	5

Compressor:

Quantity	1
Type	Twin Rotary
Oil/Type	FVC68D

Fan:

Type	Propeller
Quantity	2
Fan Motor/Drive	Brushless Digitally Controlled/Direct
Airflow Rate (CFM)	2,119 x 2

Notes:

1. Acceptable operating voltage: 187V-253V.
2. Piping lengths are equivalent.
3. 180.4 ft of Main Piping + 49.2 ft of Branch Piping.
4. 16 ft of Main Piping + 131 ft of Branch Piping.
5. At least one BD Unit is required for system operation; a maximum of two can be installed per ODU with use of Y-branch accessory (PMBL5620).
6. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 1996.
7. All power/communication cable to be minimum 16 AWG from the outdoor unit to the BD unit and 18 AWG from the BD unit to the indoor unit.
8. All power/communication cable to be 4-conductor, stranded, shielded and must comply with applicable local and national code.
9. Power wiring cable size must comply with the applicable local and national code.
10. See Performance Data Manual Capacity Tables for ODU sensible and latent capacities.
11. See Combination Data Manual for allocation of ODU rated capacity to each connected IDU when all are calling for full capacity. Allocation percentages should be applied to ODU capacity at design conditions.
12. This data is rated 0 ft above sea level, with 115 ft of refrigerant line and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 – 105%.
13. Must follow installation instructions in the applicable LG installation manual.

ENERGY STAR

Intertek

AHRI CERTIFIED
www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240

BACnet® is a registered trademark of ASHRAE. LonWorks is a trademark of Echelon Corporation. Energy Star rating at least for Non-Ducted combinations; refer to AHRI directory for complete list.

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

Job Name/Location:

LMU360HHV

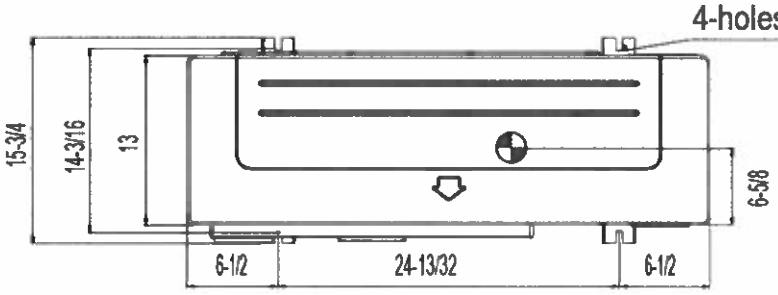
Multi F MAX with LGRED° Heat Pump Outdoor Unit

LG Life's Good

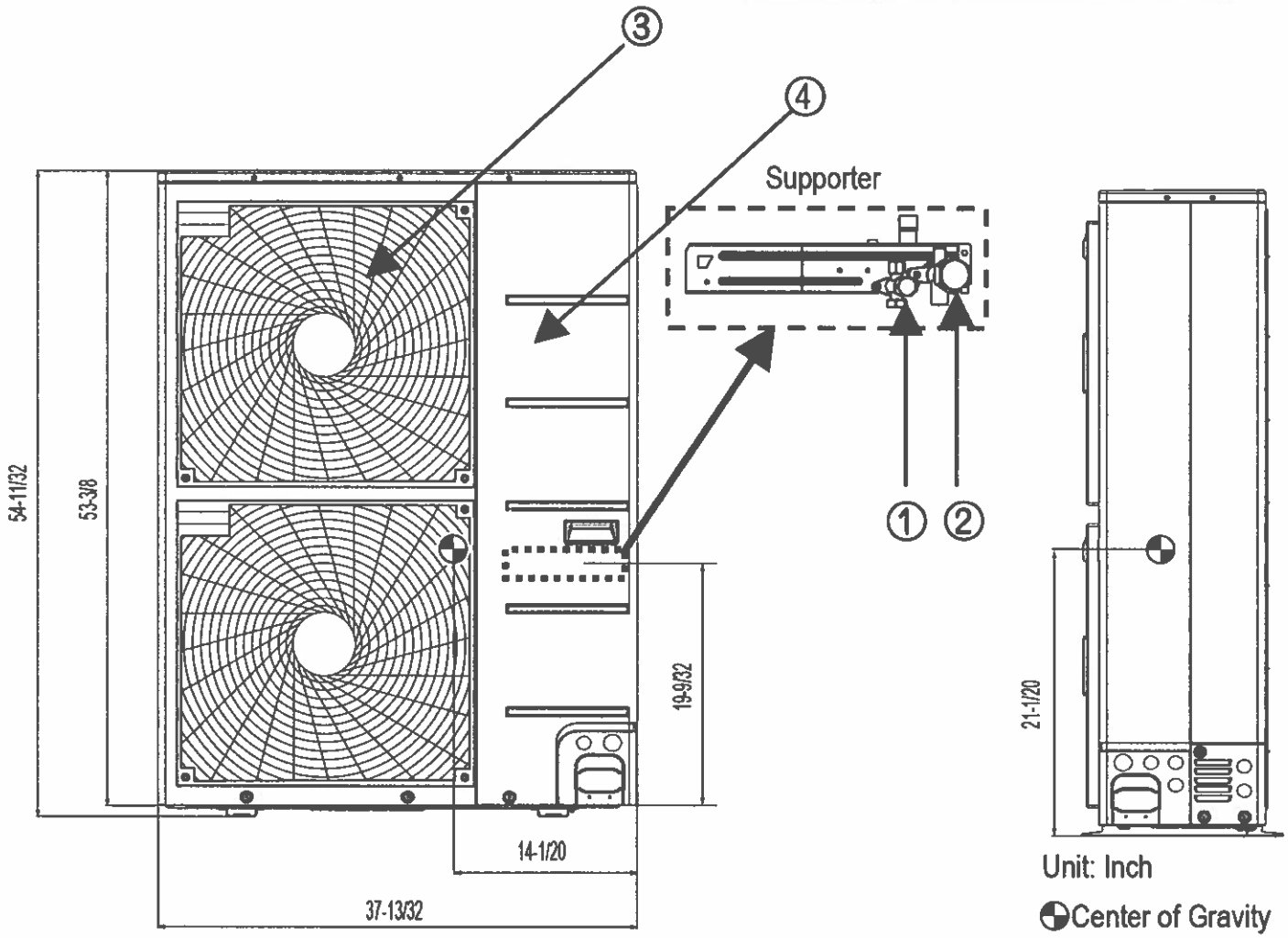
Tag #:

Date:

PO No.:



No.	Part Name
1	Liquid pipe connection
2	Gas pipe connection
3	Air discharge grille
4	Power & transmission connection



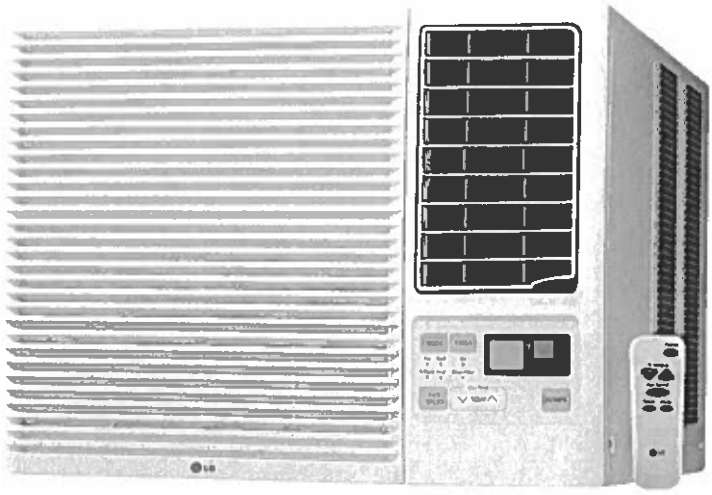
Window Air Conditioner

LW1216HR

LG
Life's Good

SOME LIKE IT HOT.
SOME LIKE IT COLD.

If you're cold, you're cold — even if it's May. That's why we've created seasonal heating and cooling. You're getting all of the things you love about an air conditioner with 12,000 BTUs, a stylish remote and multiple speeds. Only now, you can heat rooms up to 450 square feet, as well as cool rooms up to 550 square feet.



PERFORMANCE

- 11,500/12,000 BTU Cooling
  9,200/11,200 BTU Heating
- CEER 11.2/11.2 / EER 11.3/11.3
- Dehumidification (Pts/Hr) 3.3
- Est. Cooling Area 550 sq. ft.
  (Room size 22' x 25')

FEATURES

- Seasonal Heating & Cooling
- Multiple Cooling/Heating Speeds
- 4-Way Air Direction
- Remote Control
- Timer 24 Hr. On/Off

Seasonal Heating & Cooling

Whether it's cold in April or hot in October, we've got you covered all year round so you can always feel comfortable at home.

Multiple Cooling/Heating Speeds

Control the temperature of the room at your pace with our multiple heating and cooling options.

4-Way Air Direction

Enjoy the cool air even more with our 4-way air direction. By adjusting the deflection, air is directed up, down, left or right to move the air where it's needed most.

PERFORMANCE	
BTU Performance (Cooling)	11,500/12,000
BTU Performance (Heating)	9,200/11,200
CEER	11.2/11.2
EER	11.3/11.3
Dehumid. (Pts/Hr)	3.3
Dry Air Flow (CFM)	265
dBA Level (Indoor/Outdoor)	51/57
Est. Cooling Area (SQ. FT.)	550
Refrigerant	R410A

FEATURES	
Thermostat Control	Thermistor
Air Deflection	4-Way
Remote Controller	Yes
Auto Restart	Yes
Energy Saver Function	Yes
Timer	24 Hr, On/Off
Filter Alarm Function	Yes
Fan Speed Cooling/Heating	2/2
Fan Only Speed	2
Compressor	Rotary
In Door Fan Type	Blower
Type Air Discharge	Side by side
Outdoor Vent/Exhaust	Yes
Chassis Type	Slide In-Out

MATERIALS/FINISHES	
Available Colors	White

ELECTRICAL RATINGS	
Voltage/60Hz	208/230
Watts (Cooling)	1,010/1,060
Watts (Heating)	2,900/3,500
Rated Amps (Cooling)	5.1/4.8
Rated Amps (Heating)	14.0/15.3

DIMENSIONS	
Product (WxHxD)	23 5/8" x 14 31/32" x 22 1/16"
Shipping (WxHxD)	27 1/16" x 18 1/8" x 23 5/8"
Net Weight	93 lbs.
Shipping Weight	99 lbs.

LIMITED WARRANTY	
	1 Year Parts and Labor

UPC CODES	
LW1216HR	048231 379519

Heating / Calefacción

1YR PARTS & LABOR

230/208 Volt 20 Amp

LG Electronics U.S.A., Inc.
1000 Sylvan Avenue Englewood Cliffs, NJ 07632
Customer Service and Technical Support: (800) 243-0000
LG.com