# Cleveland Landmarks Commission

**Thursday, March 24, 2022**

****PLEASE MUTE YOUR MICROPHONE****

Julie Trott, Commission Chair
Donald Petit, Secretary

# Cleveland Landmarks Commission

**Preamble**

**IN COMPLIANCE WITH NOTIFICATION REQUIREMENTS OF OHIO'S OPEN MEETING LAW AND SECTION 101.021 OF THE CODIFIED ORDINANCES OF CLEVELAND, OHIO, 1976, NOTICE OF THIS MEETING HAS BEEN PUBLICLY POSTED.**

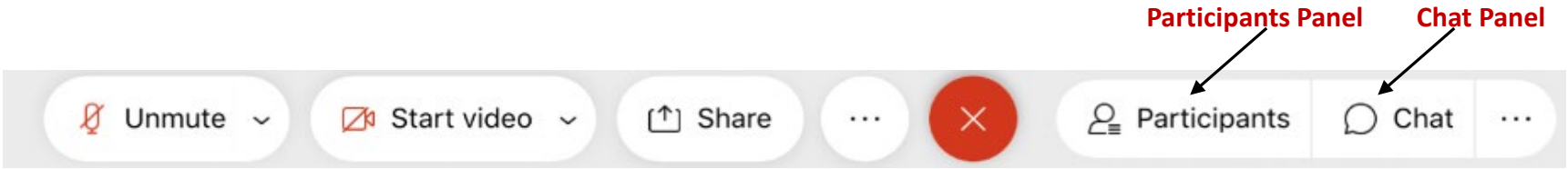
**ALL BOARDS AND COMMISSIONS UNDER THE PURVIEW OF THE CITY PLANNING DEPARTMENT CONDUCTS ITS MEETINGS ACCORDING TO ROBERT'S RULES OF ORDER. ACTIONS DURING THE MEETING WILL BE TAKEN BY VOICE VOTE. ABSTENTIONS FROM ANY VOTE DUE TO A CONFLICT OF INTEREST SHOULD BE STATED FOR THE RECORD PRIOR TO THE TAKING OF ANY VOTE.**

**IN ORDER TO ENSURE THAT EVERYONE PARTICIPATING IN THE MEETING HAS THE OPPORTUNITY TO BE HEARD, WE ASK THAT YOU USE THE RAISE HAND FEATURE BEFORE ASKING A QUESTION OR MAKING A COMMENT. THE RAISE HAND FEATURE CAN BE FOUND IN THE PARTICIPANTS PANEL ON THE DESKTOP AND MOBILE VERSION AND ACTIVATED BY CLICKING THE HAND ICON. PLEASE WAIT FOR THE CHAIR OR FACILITATOR TO RECOGNIZE YOU AND BE SURE TO SELECT UNMUTE AND ANNOUNCE YOURSELF BEFORE YOU SPEAK. WHEN FINISHED SPEAKING, PLEASE LOWER YOUR HAND BY CLICKING ON THE RAISE HAND ICON AGAIN AND MUTE YOUR MICROPHONE.**

**WE WILL ALSO BE UTILIZING THE CHAT FEATURE TO COMMUNICATE WITH PARTICIPANTS. THE CHAT FEATURE CAN BE ACTIVATED BY CLICKING THE CHAT BUTTON LOCATED ON THE BOTTOM OF THE WEBEX SCREEN.**




**CALL-IN USERS CAN UNMUTE BY USING *6**



# Cleveland Landmarks Commission

**Preamble**

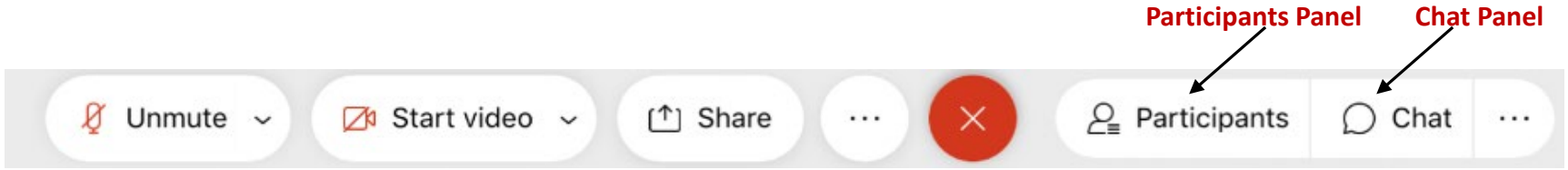
**ALL MEETING ACTIVITY IS BEING RECORDED VIA THE WEBEX PLATFORM.**

**THESE PROCEEDINGS ARE ALSO BEING LIVE STREAMED VIA YOUTUBE.**

**ALL REQUESTS TO SPEAK ON A PARTICULAR MATTER VIA OUR WEBSITE AND EMAIL HAVE BEEN CONSIDERED.**

**WE HAVE ALSO RECEIVED EMAILS FROM THOSE WHO HAVE PROVIDED WRITTEN COMMENT ON A PARTICULAR MATTER.**




March 24, 2022

# Cleveland Landmarks Commission

## Call to Order & Roll Call

March 24, 2022

# Cleveland Landmarks Commission

## Certificates of Appropriateness

March 24, 2022

# Certificates of Appropriateness

March 24, 2022

**Case 22-004:** Rockefeller Park (Concept Plan 1/13/22)
**Jesse Owens Olympic Oak Plaza Martin Luther King, Jr. Drive**
Landscaping and Site Improvements
Ward 7: Howse
Project Representatives: Elise Yablonsky, University Circle, Inc.; Jayme Schwartzberg, DERU Landscape Architecture; Angelica Pozo, Artist




# Jesse Owens Olympic Oak Plaza in Rockefeller Park

## Plan Update and Art Review

## University Circle, Inc.

Angelica Pozo, Artist

DERUlandscape architecture
812 Huron Road E, #411 Cleveland. OH 44115 | 216.466.4355



# Agenda

I. Welcome

II. Project Introduction

III. Project Timeline

IV. Plan Update

V. Public Art Approach

## Olympic Oak Trees

Owens was given 4 Olympic Oak trees at the 1936 Olympics – one for each gold medal. He planted one at his mother's house in Cleveland, one at Rhodes High School, one at OSU, and he claimed that one died before he could plant it.

The tree at Rhodes High School is the only confirmed surviving Olympic Oak Tree.

The English Oak at Rhodes High School has been aging, and in 2017 the tree was cloned and propagated at the Holden Arboretum, where it currently resides.

New clone from original tree planted in Rockefeller Park April 2021.








Photos of Owens' Olympic Oak Tree (from Associated Press, Freshwater Cleveland



# Rockefeller Park Jesse Owens Olympic Oak Timeline

- Summer 2020 – Rockefeller Park location identified
- Fall 2020 – Conceptual planning for tree location and plaza
- April 2021 – Jesse Owens Olympic Oak Tree planted
- June 2021 – Public engagement at Rockefeller Park Lagoon
- September 2021 – Base funding secured, design process continues
- December 2021 – Virtual Community Meeting, City Council and Planning Commission approval secured for property adoption agreement
- January 2022 – Conceptual Approval from the Landmarks Commission, Launch of Website for Community Responses
- February 2022 - Project Bidding
- Spring 2022 - Plaza Groundbreaking



# Plaza Location Map



Proposed Plaza Design (Approved by Landmarks Commission 01/13/22)



Details

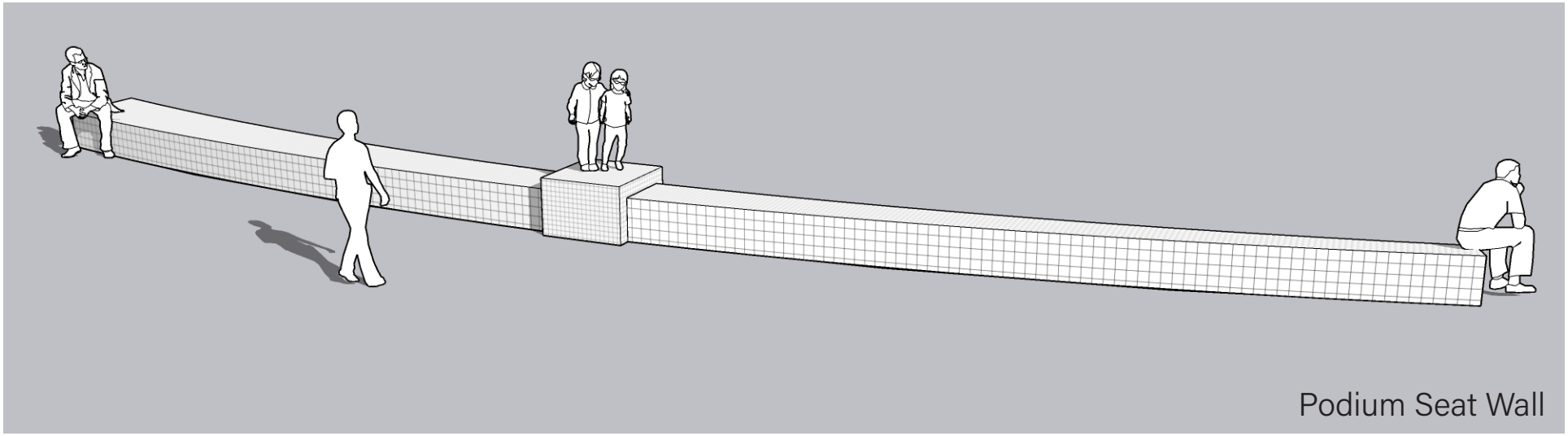




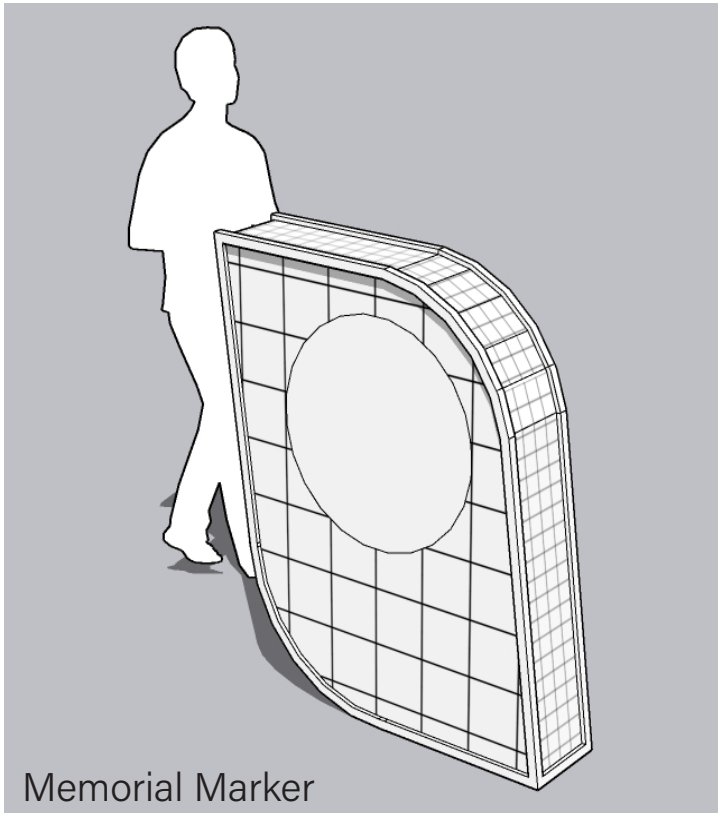



620
Mature Canopy Size
621
622
Winners Stand with
Jesse Owens Bio
LONG JUMP

Tiled Winner's Stand and Memorial Markers



Podium Seat Wall

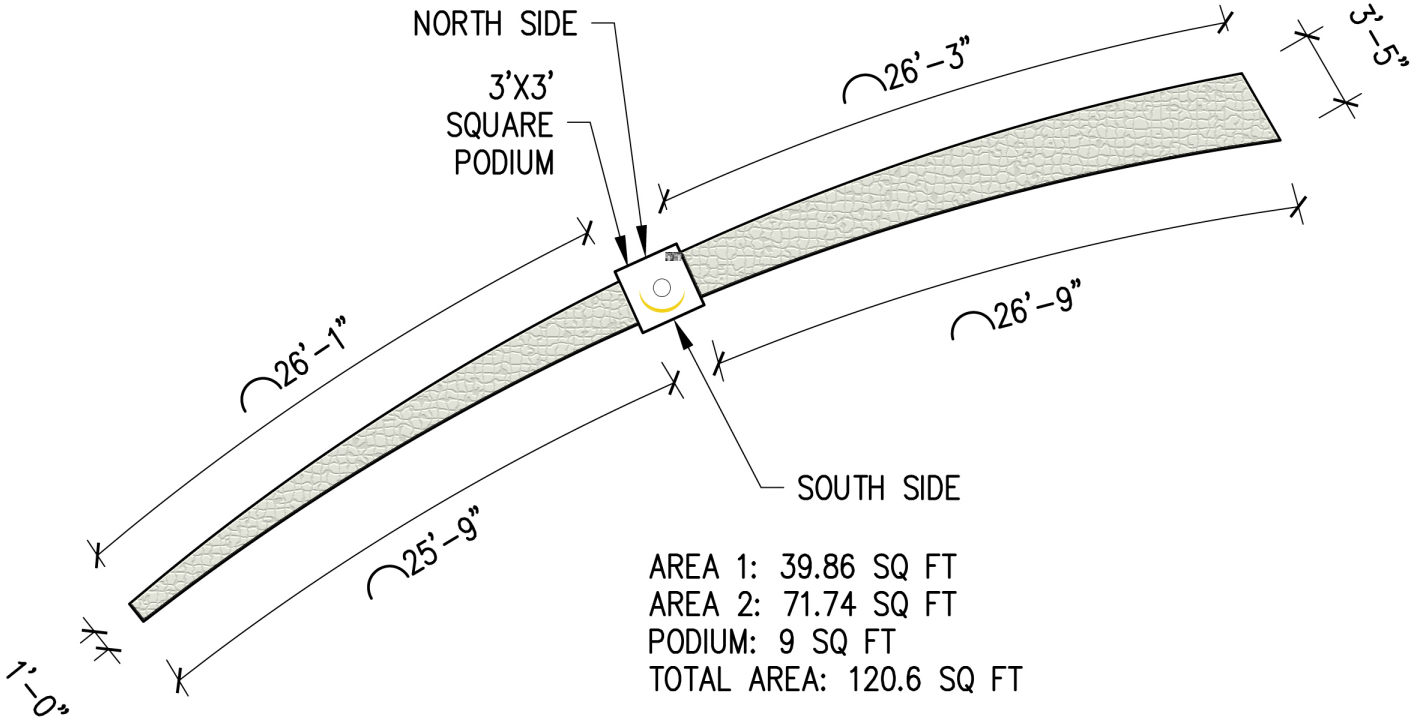


Memorial Marker

# Jesse Owens Olympic Oak Memorial

Art Proposal

Angelica Pozo

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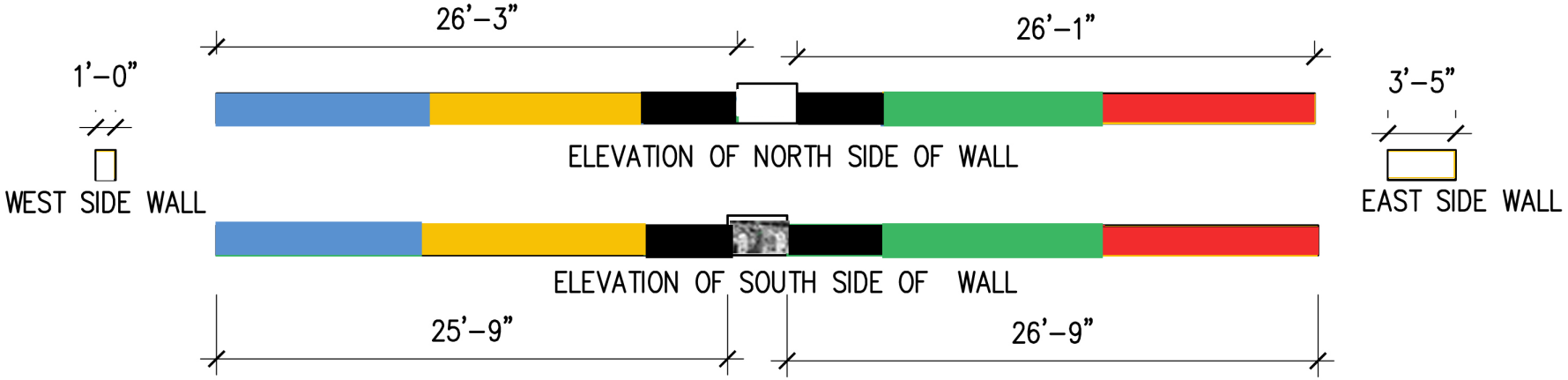
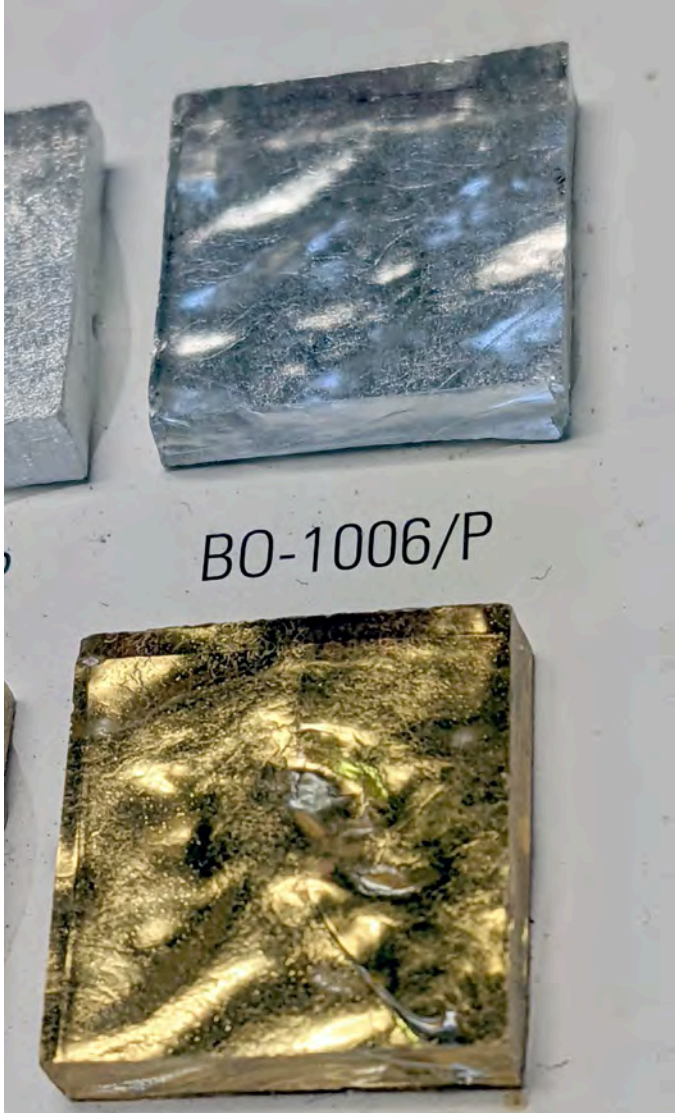
AREA 2: 71.74 SQ FT
PODIUM: 9 SQ FT
TOTAL AREA: 120.6 SQ FT




SCALE: 1" = 8-0"

0' 4' 8' 16'

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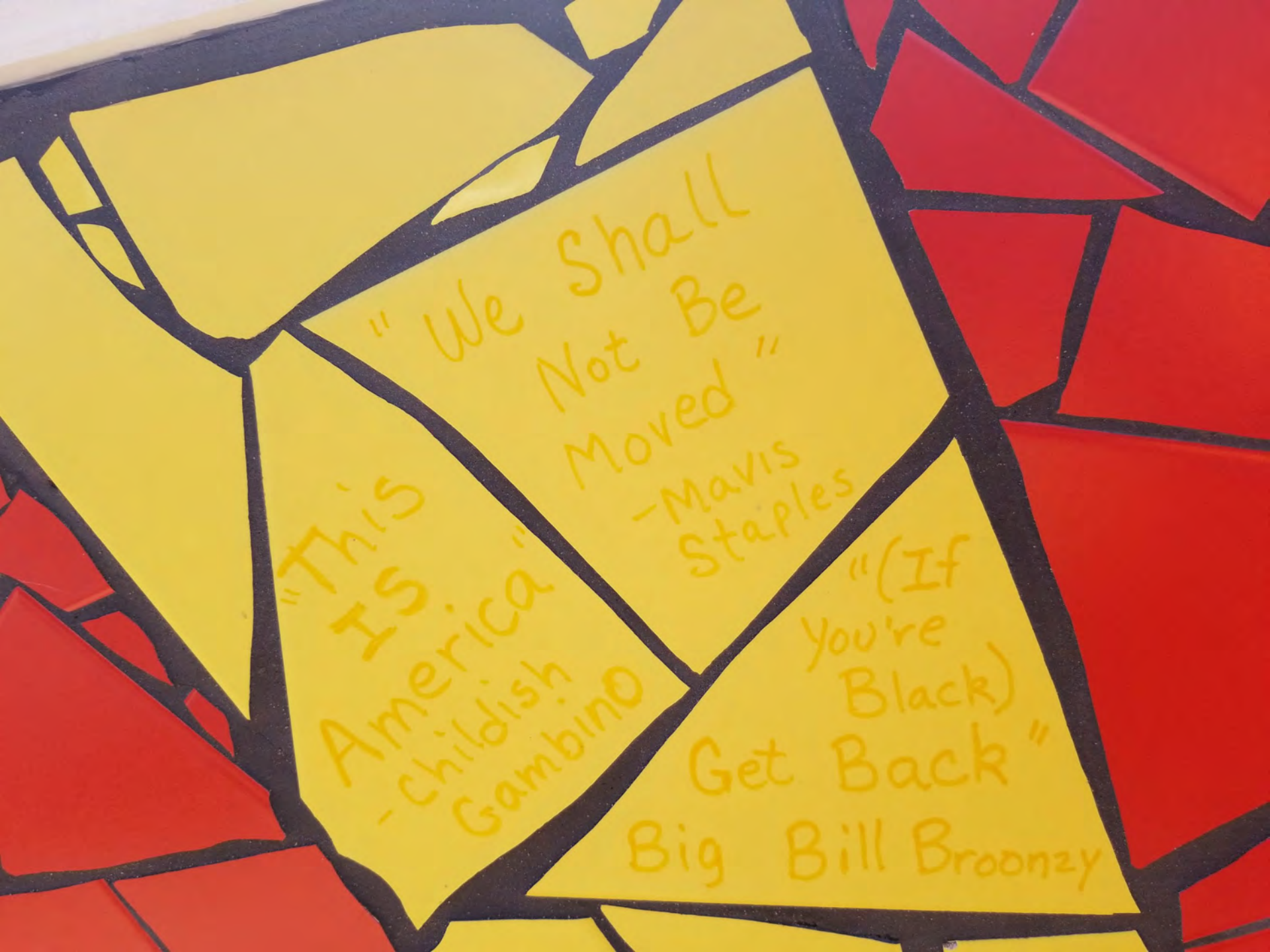
NO-1001/P




"We Shall Not Be Moved"
-Mavis Staples
"This is America"
-Childish Gambino
"(If You're Black) Get Back"
Big Bill Broonzy

“We all have dreams. But in order to make dreams come into reality, it takes an awful lot of determination, dedication, self-discipline, and effort.” – Jesse Owens

## What Are Your Dreams?

“The battles that count aren't the ones for gold medals. The struggles within yourself - the invisible, inevitable battles inside all of us - that's where it's at.” – Jesse Owens

## What Is Your Invisible Battle?

# NATURAL HUES™
# Two Library Cards and Chip Chest
(size 10x14)

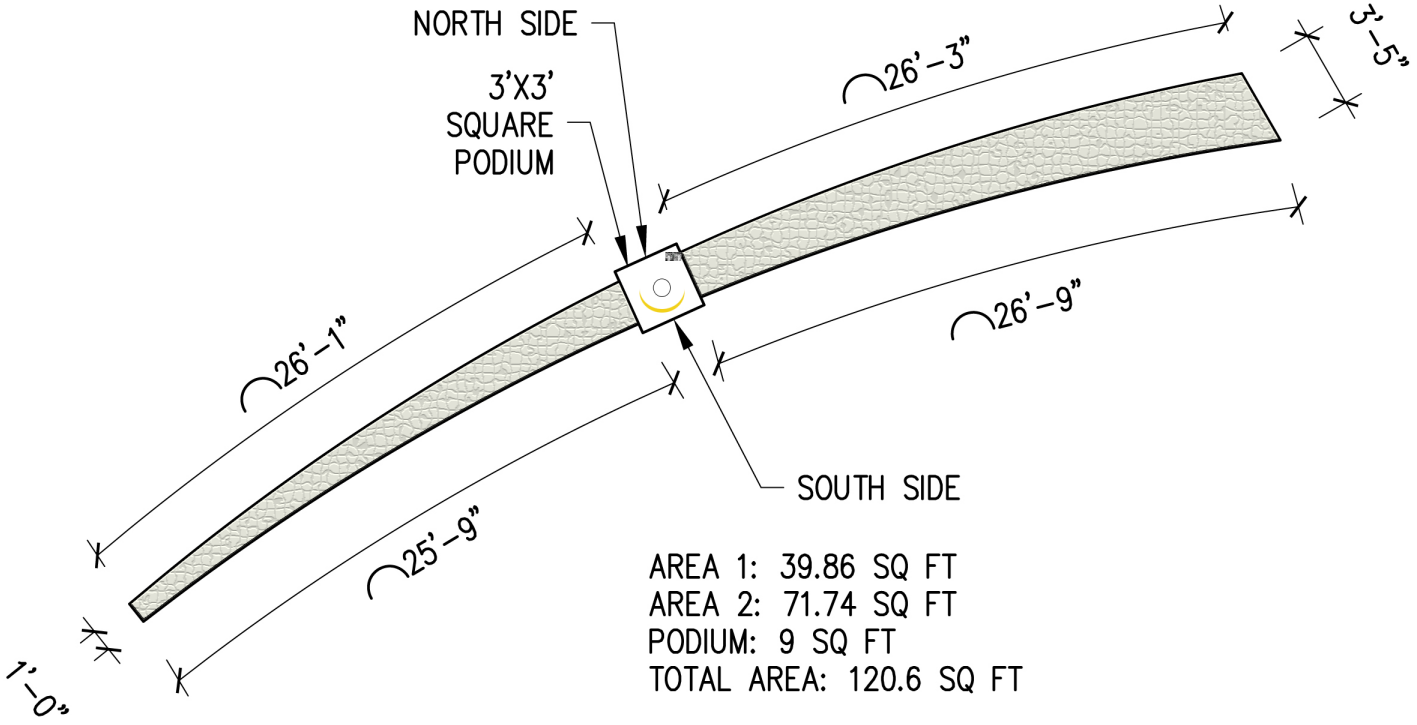



Natural Hues (1) and (2)
Library Card




Natural Hues Chip Chest -
filled with 2x4 color samples

You can order your Natural Hues Library Cards / Chip Chest online

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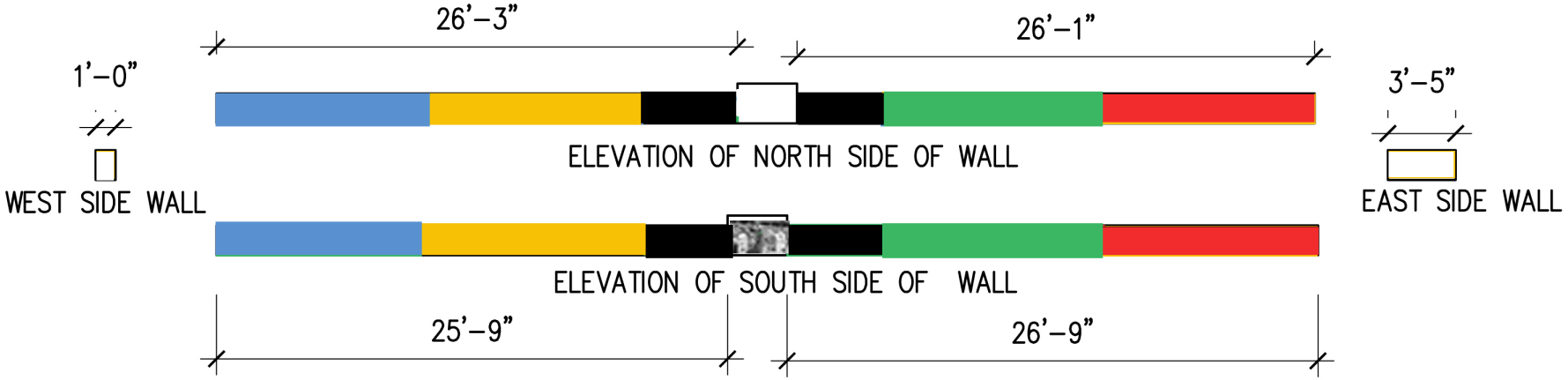



SCALE: 1" = 8-0"

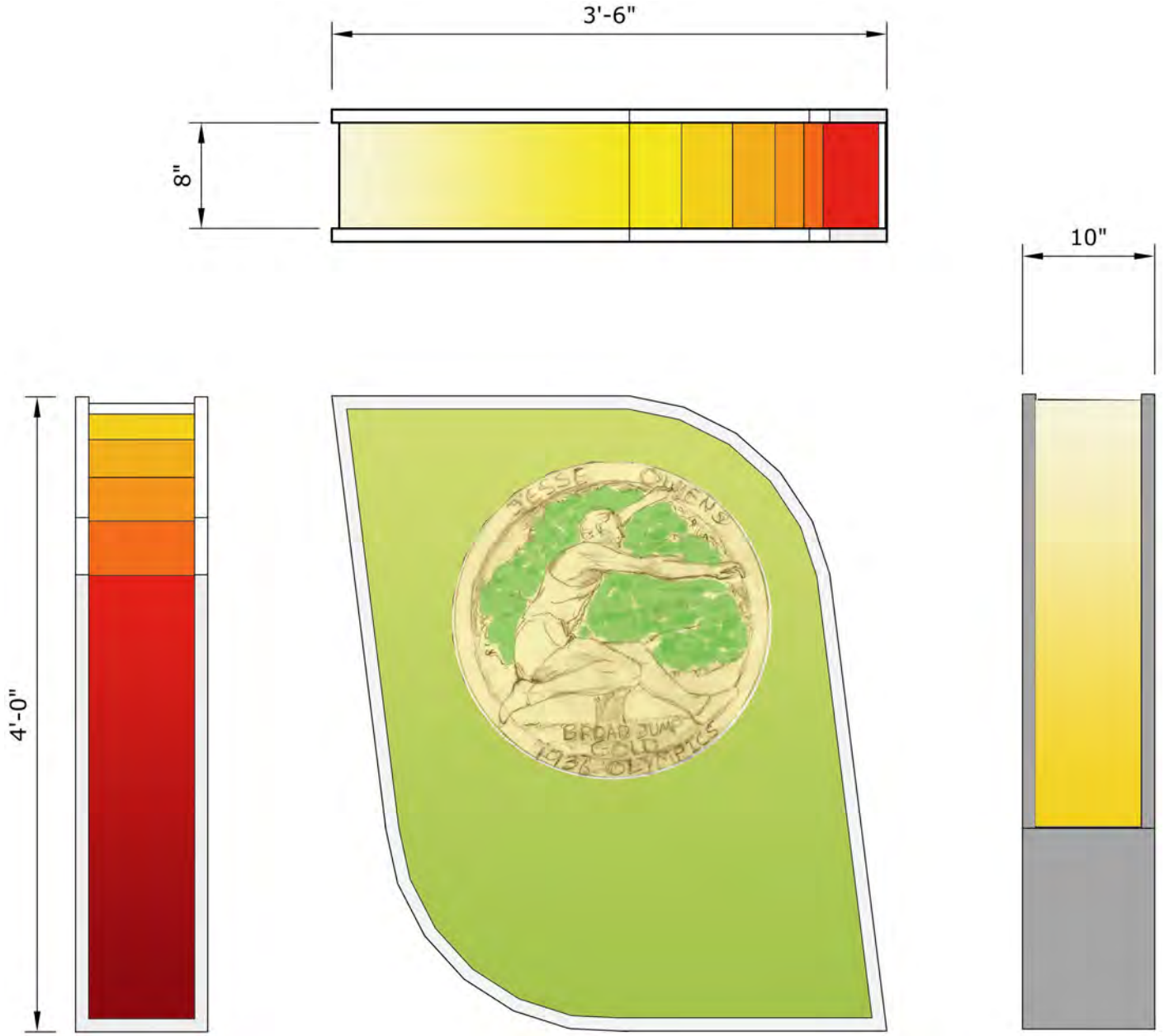
0' 4' 8' 16'

North side of Podium: “Jesse Owens Olympic Tree Plaza, etc..” with image of depiction of Olympic rings

South Side of Podium: photo below

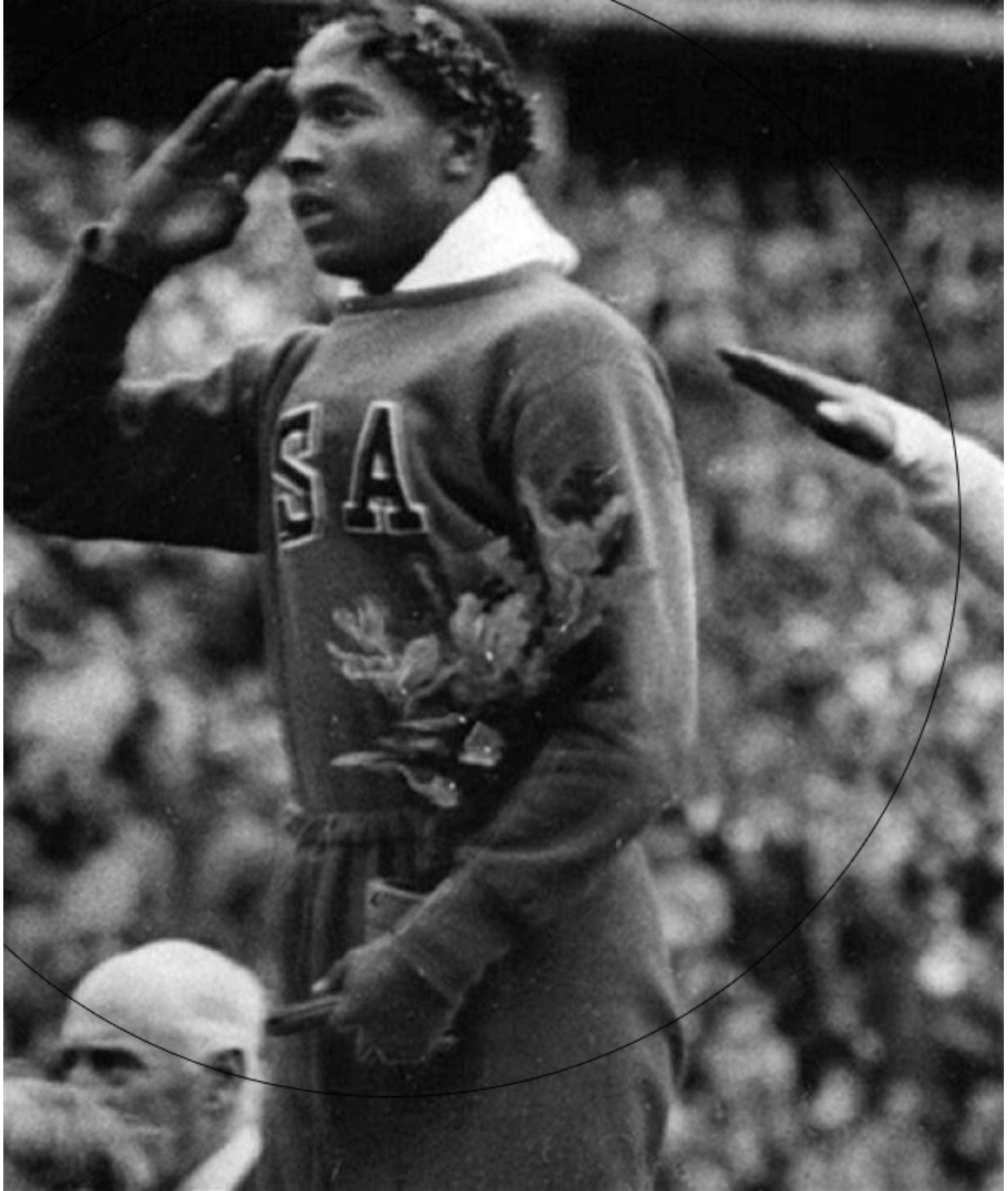


# Markers


3'-6"
8"
10"
4'-0"
JESSE OWENS
BROAD JUMP
GOLD
1936 OLYMPICS


JESSE OWENS
BROAD JUMP
GOLD
1936 OLYMPICS

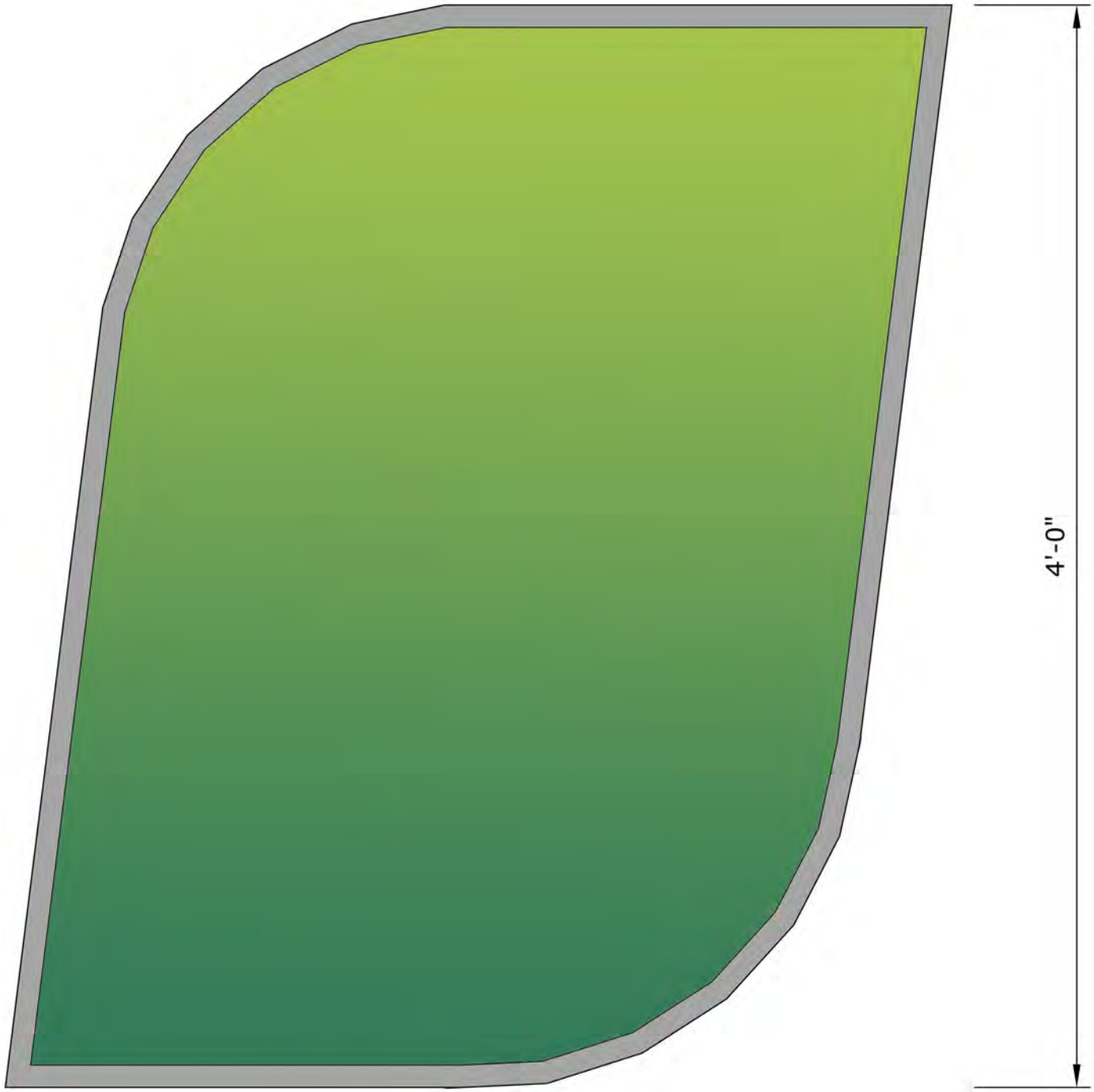



SA




JESSE OWENS
BROAD JUMP
GOLD
1936 OLYMPICS
4'-0"


KIWI QH30
1
FERN QH80
2


4'-0"



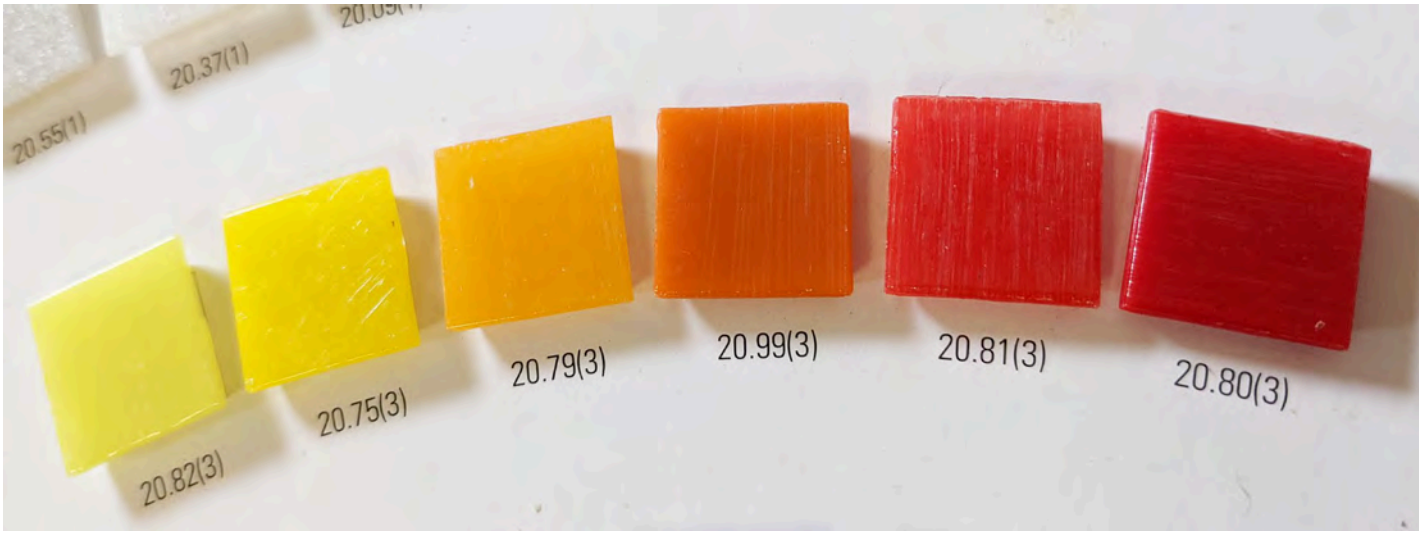
FERN QH80

2



SPRING GREEN QH29

1


20.55(1)
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20.79(3)
20.99(3)
20.81(3)
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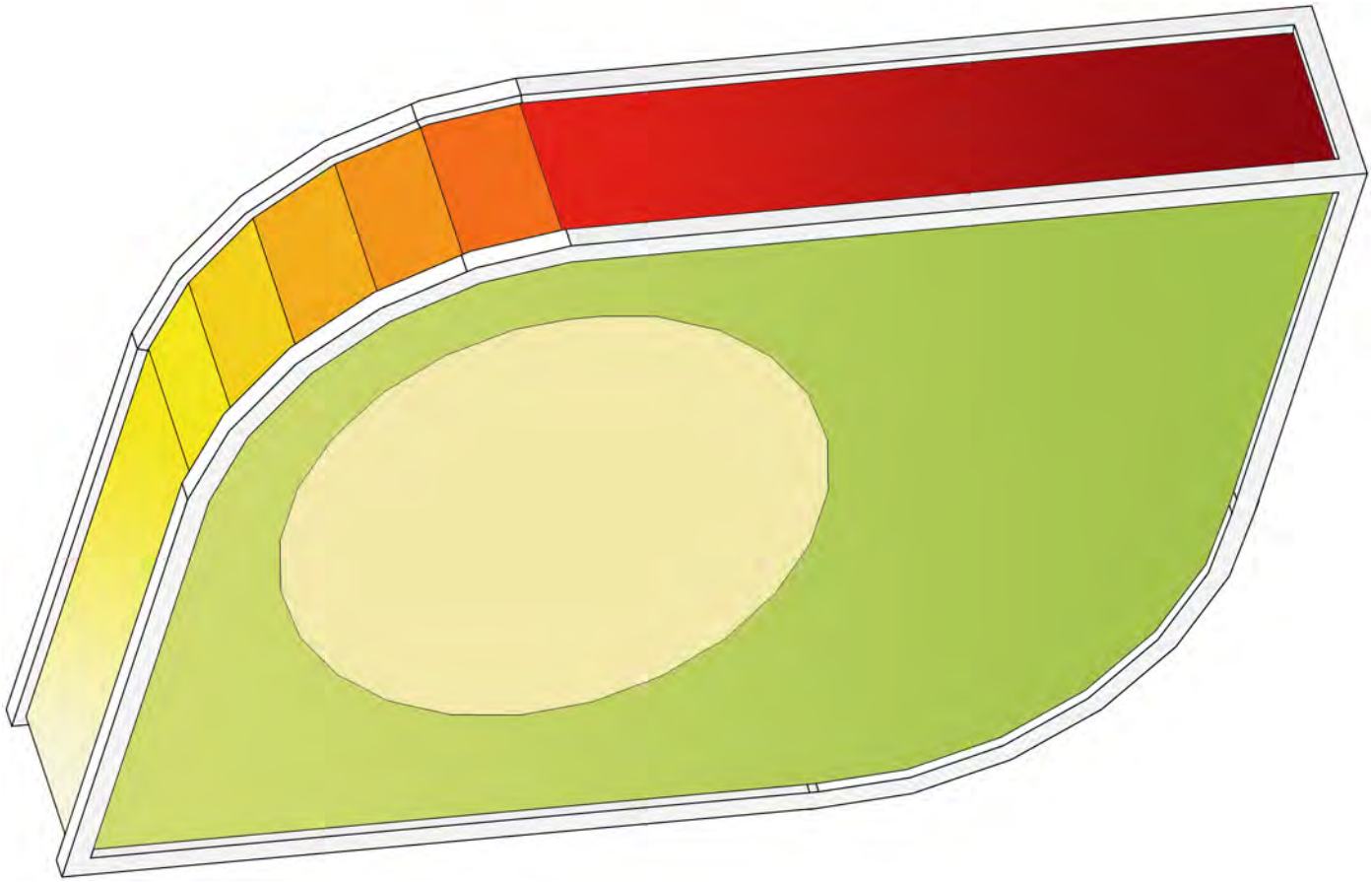


# OPUS ROMANO 12 12 x 12 mm (1/2″x 1/2″)

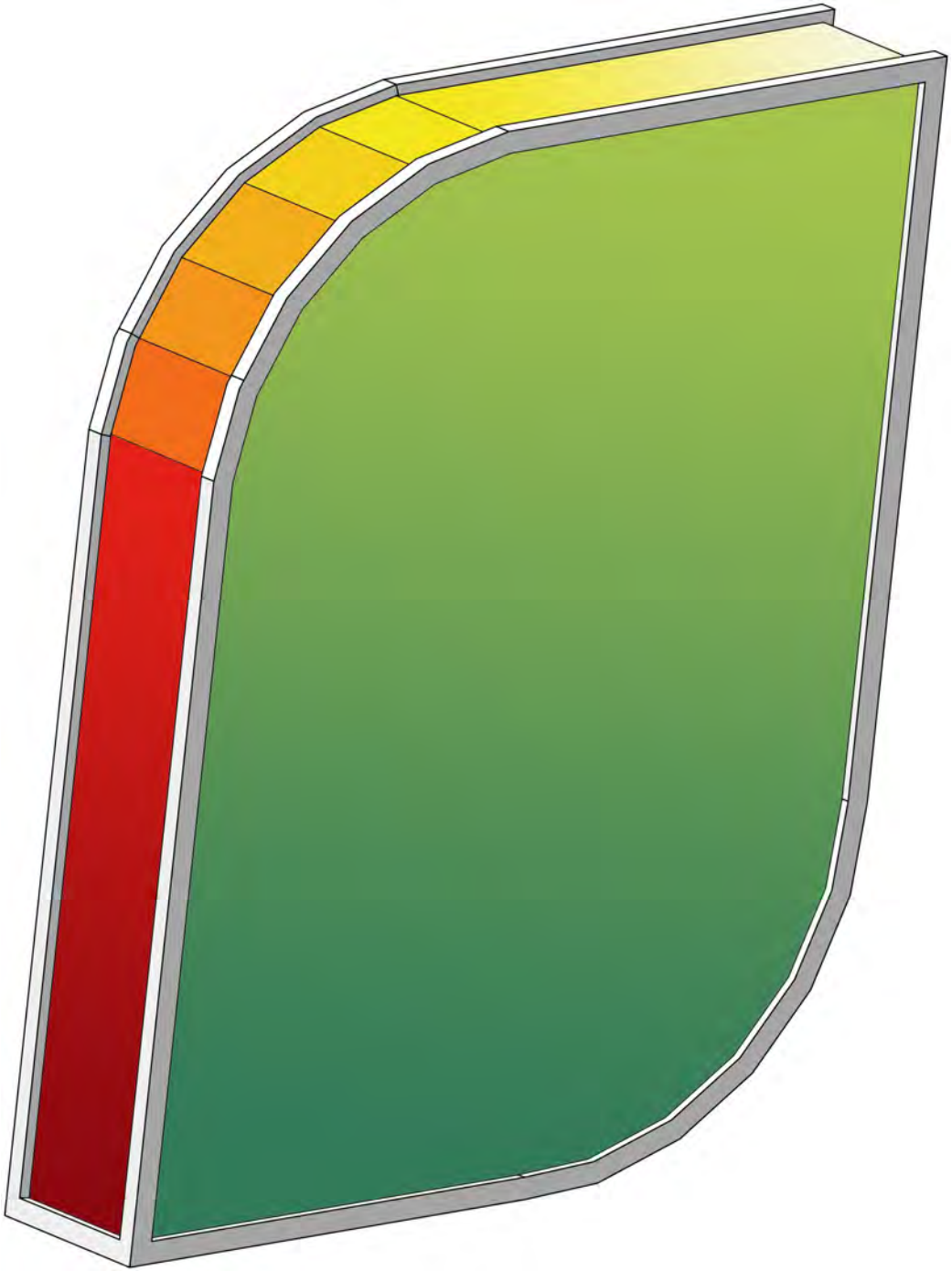
| | | | | | |
|---|---|---|---|---|---|
| **12.09**<br>Fillgel plus 2201 | **12.07**<br>Fillgel plus 3305 | **12.05**<br>Fillgel plus 3305 | **12.04**<br>Fillgel plus 3302 | **12.02**<br>Fillgel plus 3302 | **12.01**<br>Fillgel plus 3302 |
| **12.133**<br>Fillgel plus 3306 | **12.131**<br>Fillgel plus 3306 | **12.130**<br>Fillgel plus 3306 | **12.128**<br>Fillgel plus 3306 | | |
| **12.117**<br>Fillgel plus 3305 | **12.48**<br>Fillgel plus 3305 | **12.47**<br>Fillgel plus 3305 | **12.19**<br>Fillgel plus 3305 | **12.16**<br>Fillgel plus 3305 | **12.11**<br>Fillgel plus 3305 | **12.22**<br>Fillgel plus 3305 |
| **12.54**<br>Fillgel plus 4407 | **12.20**<br>Fillgel plus 6603 | **12.111**<br>Fillgel plus 6603 | **12.62**<br>Fillgel plus 6603 | **12.60**<br>Fillgel plus 6603 | **12.57**<br>Fillgel plus 6603 | **12.55**<br>Fillgel plus 3305 |
| **12.34**<br>Fillgel plus 4407 | **12.40**<br>Fillgel plus 4407 | **12.39**<br>Fillgel plus 4407 | **12.103**<br>Fillgel plus 4407 | **12.36**<br>Fillgel plus 4407 | **12.45**<br>Fillgel plus 3305 | **12.44**<br>Fillgel plus 3305 |
| **12.53**<br>Fillgel plus 4407 | **12.42**<br>Fillgel plus 4407 | **12.106**<br>Fillgel plus 8806 | **12.104**<br>Fillgel plus 8806 | **12.91**<br>Fillgel plus 8806 | **12.99**<br>Fillgel plus 3305 | **12.98**<br>Fillgel plus 3305 |
| **12.96**<br>Fillgel plus 8806 | **12.118**<br>Fillgel plus 8806 | **12.88**<br>Fillgel plus 8805 | **12.87**<br>Fillgel plus 8801 | **12.85**<br>Fillgel plus 8805 | **12.84**<br>Fillgel plus 8801 | **12.116**<br>Fillgel plus 8801 |
| **12.82**<br>Fillgel plus 3305 | **12.81**<br>Fillgel plus 7702 | **12.78**<br>Fillgel plus 3305 | **12.77**<br>Fillgel plus 3305 | **12.76**<br>Fillgel plus 3305 | | |
| **12.113**<br>Fillgel plus 7705 | **12.74**<br>Fillgel plus 7705 | **12.75**<br>Fillgel plus 7702 | **12.110**<br>Fillgel plus 7702 | | **ORO 12.1**<br>Fillgel plus 5501 | **ORO 12.6**<br>Fillgel plus 7704 |

Fillgel plus: stucco colorato Bisazza / coloured Bisazza grout / joint coloré Bisazza / farbige Bisazza Fugenmasse / junta de color Bisazza

**Unità d'ordine** / order unit / unité de commande / bestelleinheit / unidad de pedido: 1,29 m²/sqm (13,88 SF), **Montato su carta** / paper face mounted / collée sur papier / vorderseitig papiergeklebt / montado sobre papel



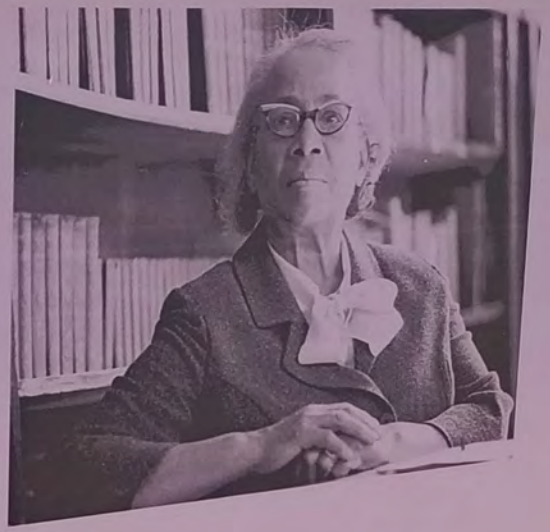
**12.09**





a Otero-Warren

81–1965) was a woman's suffragist, educator, and
ero-Warren created a legacy of civil service
olitics, and public health.



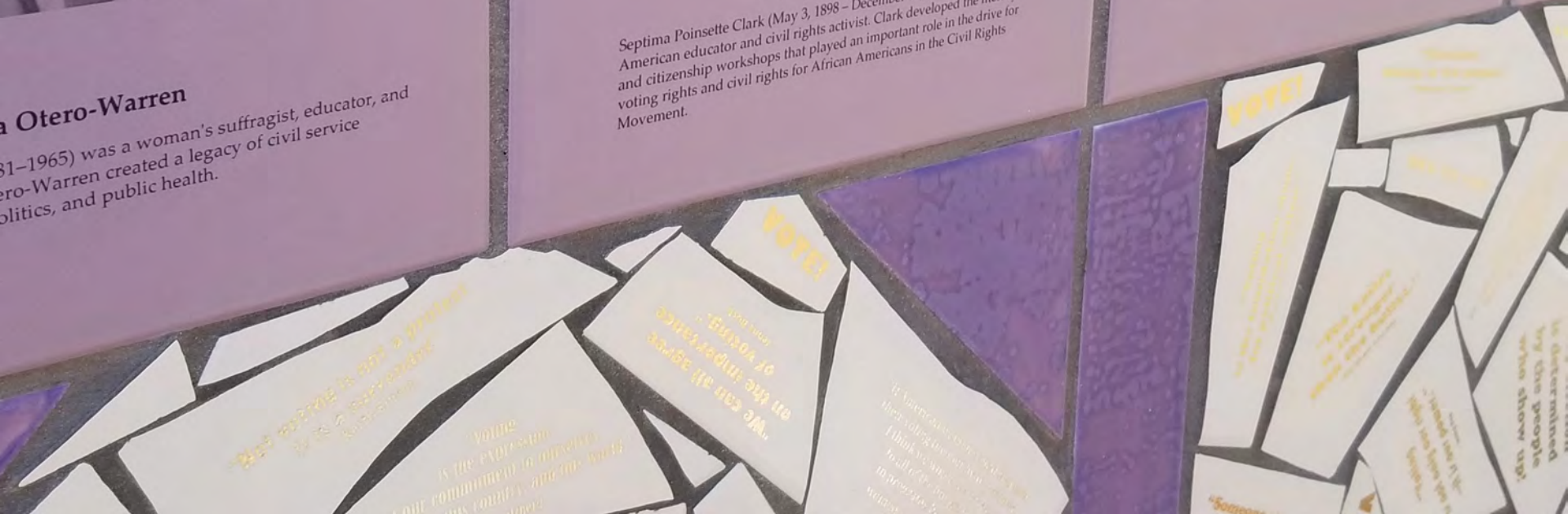
Septima Poinsette Clark

Septima Poinsette Clark (May 3, 1898 – December 15, 1987) was a black American educator and civil rights activist. Clark developed the literacy and citizenship workshops that played an important role in the drive for voting rights and civil rights for African Americans in the Civil Rights Movement.



Reverend Dr. Anna Howard Shaw

Anna Howard Shaw (February 14, 1847 – July 2, 1919) was a leader of the women's suffrage movement in the United States. She was also a physician and one of the first ordained female Methodist ministers in the United States.



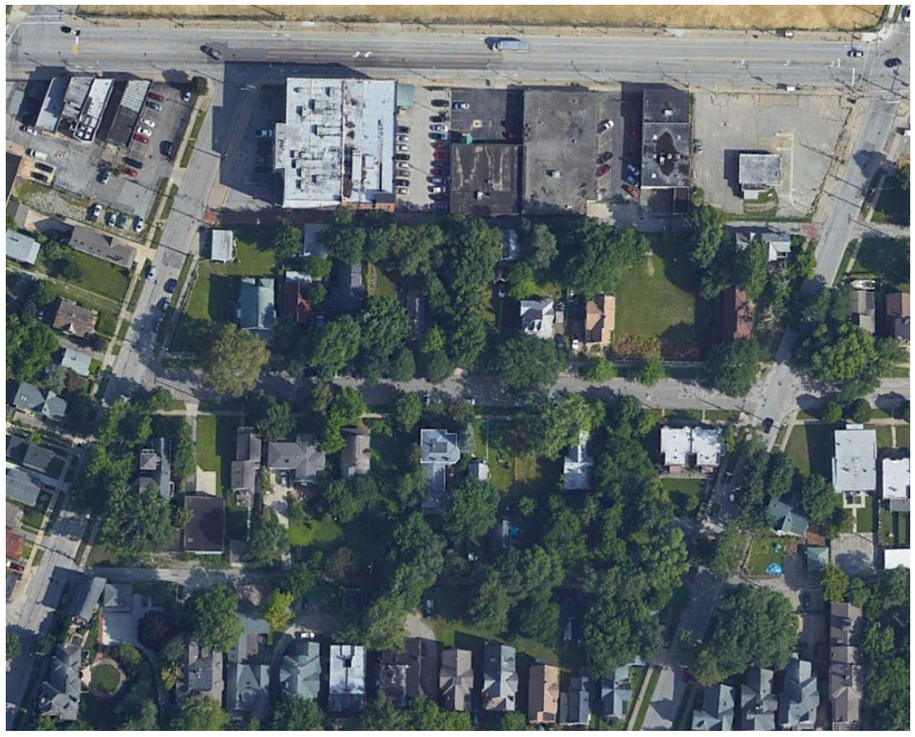
# Certificates of Appropriateness

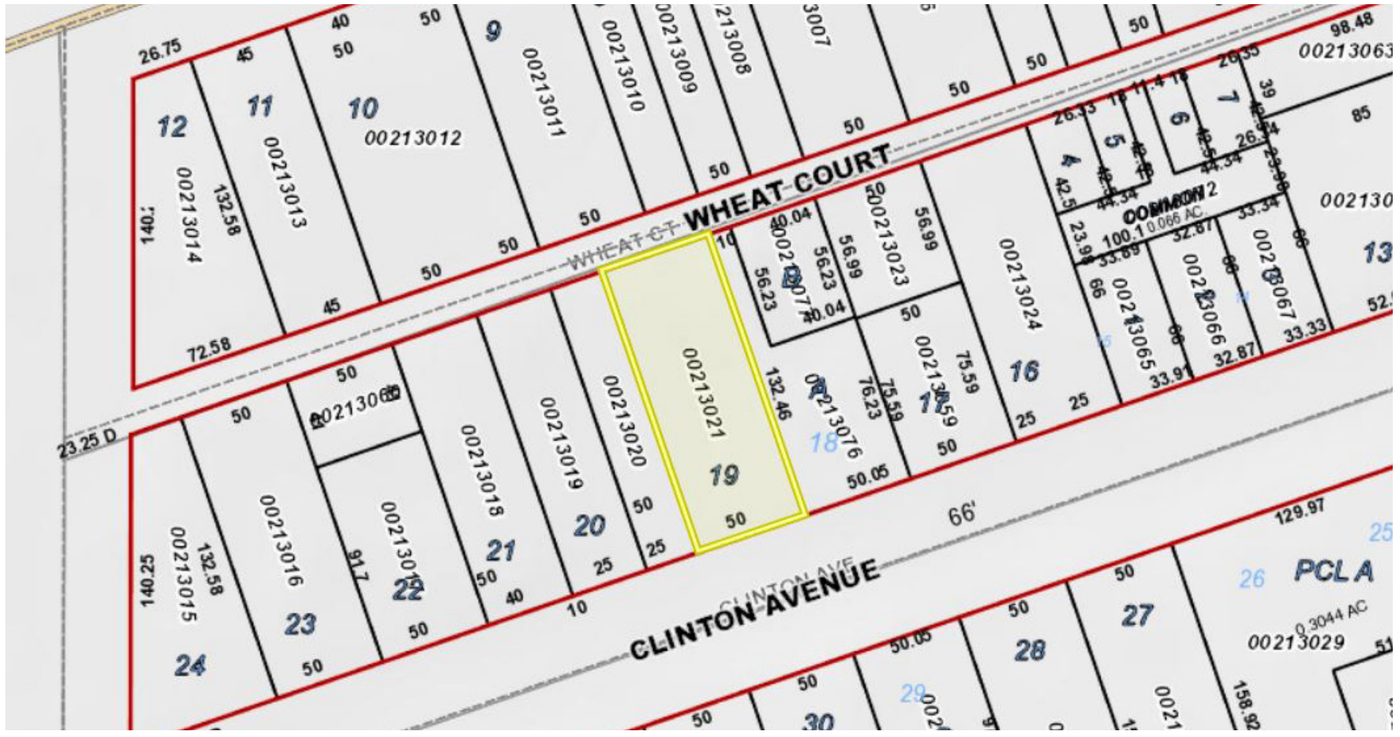
March 24, 2022

**Case 22-023:** Ohio City Historic District (Concept Plan 2/10/22)
**Wells Residence 4612 Clinton Avenue**
New Construction of a Single-Family House
Ward 3: McCormack
Project Representatives: Chris Rood, Architect; Anthony Kucia, CCBR, Developer

# WELLS RESIDENCE

4612 CLINTON AVENUE
LANDMARKS DESIGN SUBMISSION
MARCH 24, 2022






LOCATION: 4612 CLINTON AVENUE

PARCEL #: 00213021
ZONING: TWO-FAMILY
ZONING CODE: 2F-B1
AREA DISTRICT: B
HEIGHT DISTRICT: 1
MAX. HEIGHT: 35' (UP TO 50' W/ APPROPRIATE SETBACKS)
PROPOSED HEIGHT: 29'-10"


CARTER
CLE
216.410.2122


CARTER


CARTER






4616



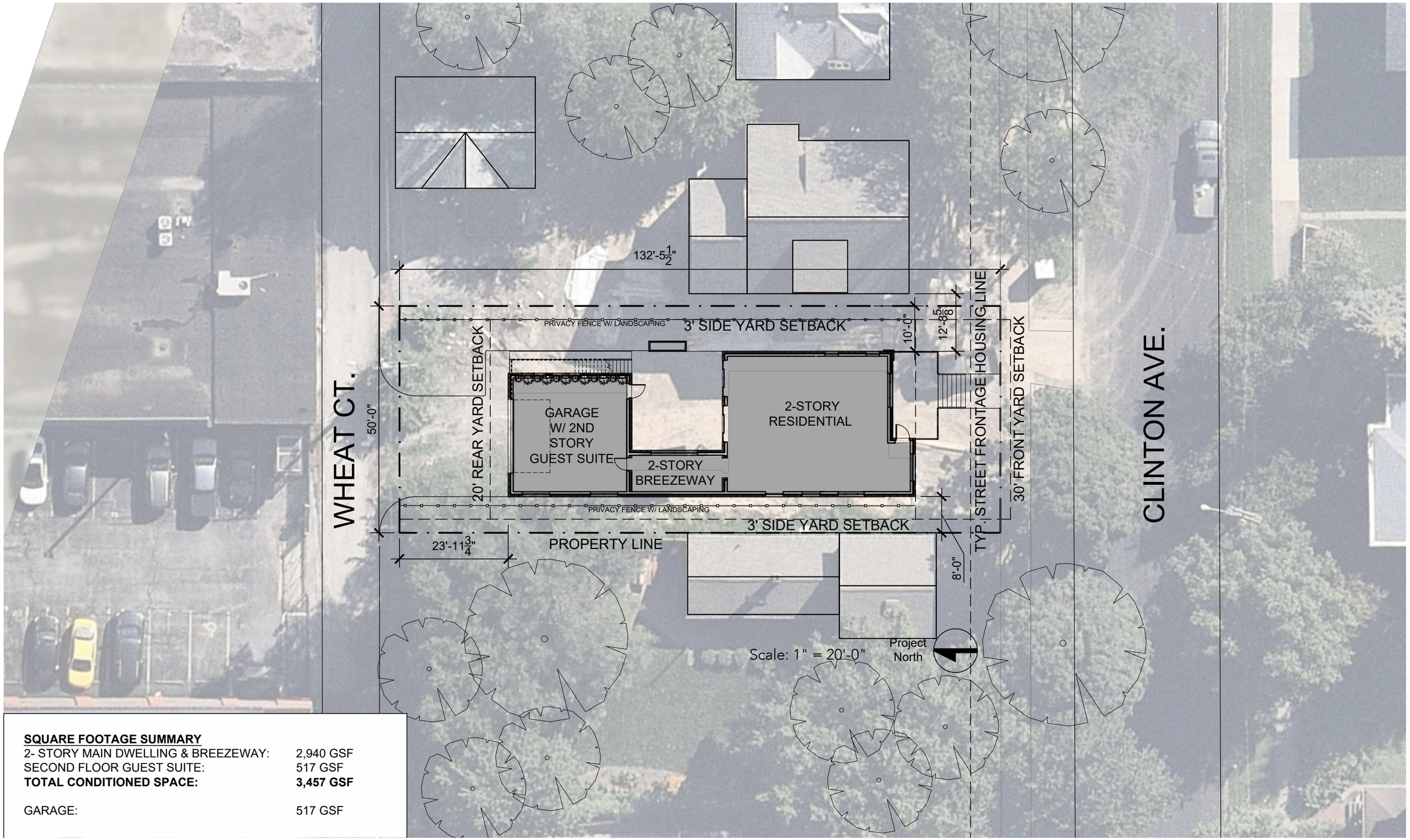





4603

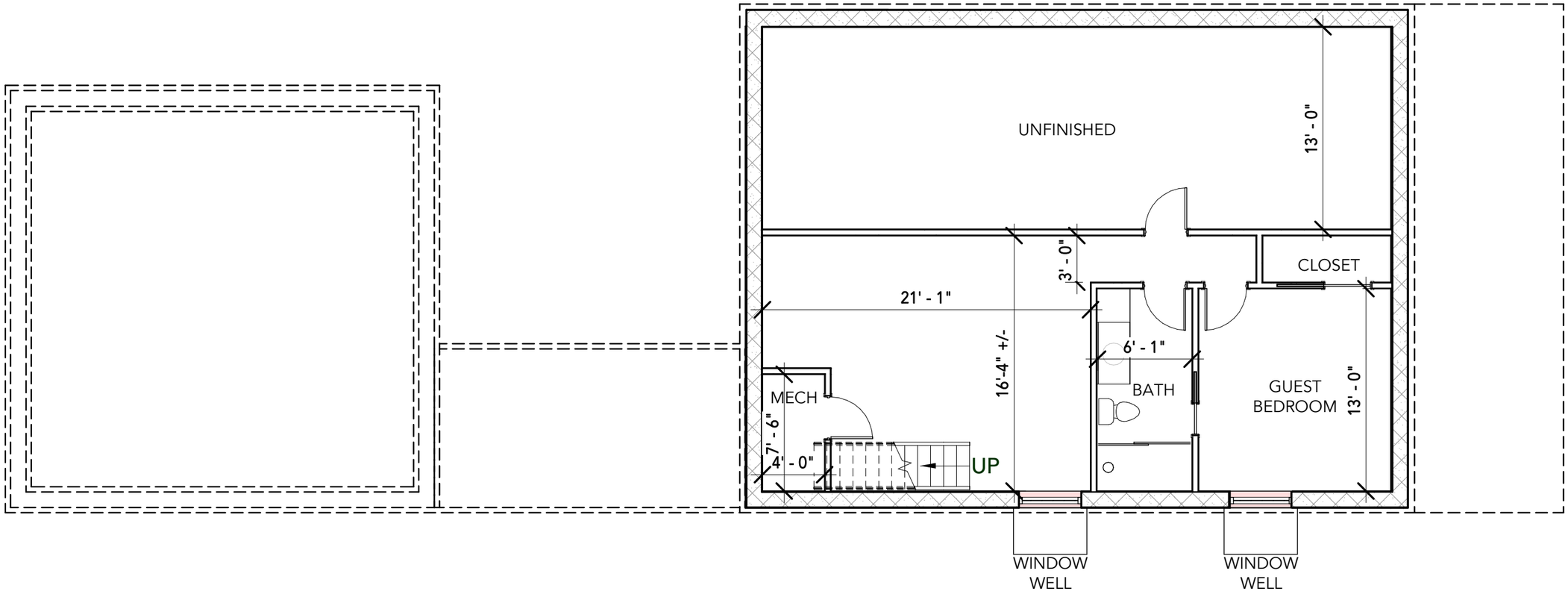







**SQUARE FOOTAGE SUMMARY**

| | |
|---|---|
| 2- STORY MAIN DWELLING & BREEZEWAY: | 2,940 GSF |
| SECOND FLOOR GUEST SUITE: | 517 GSF |
| **TOTAL CONDITIONED SPACE:** | **3,457 GSF** |
| | |
| GARAGE: | 517 GSF |

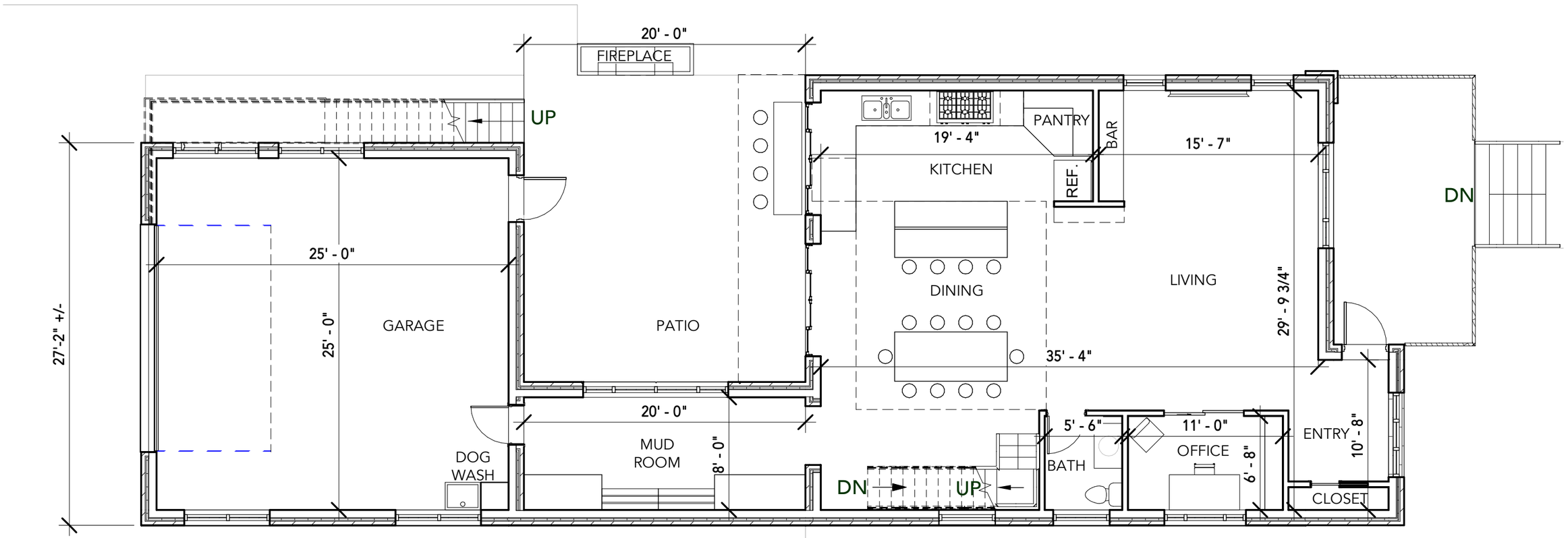



1 BASEMENT FLOOR PLAN

SCALE: 1/8" = 1'-0"

Project North

0' 1' 4' 8' 16' 32'




1 LEVEL 1 FLOOR PLAN

SCALE: 1/8" = 1'-0"

Project North

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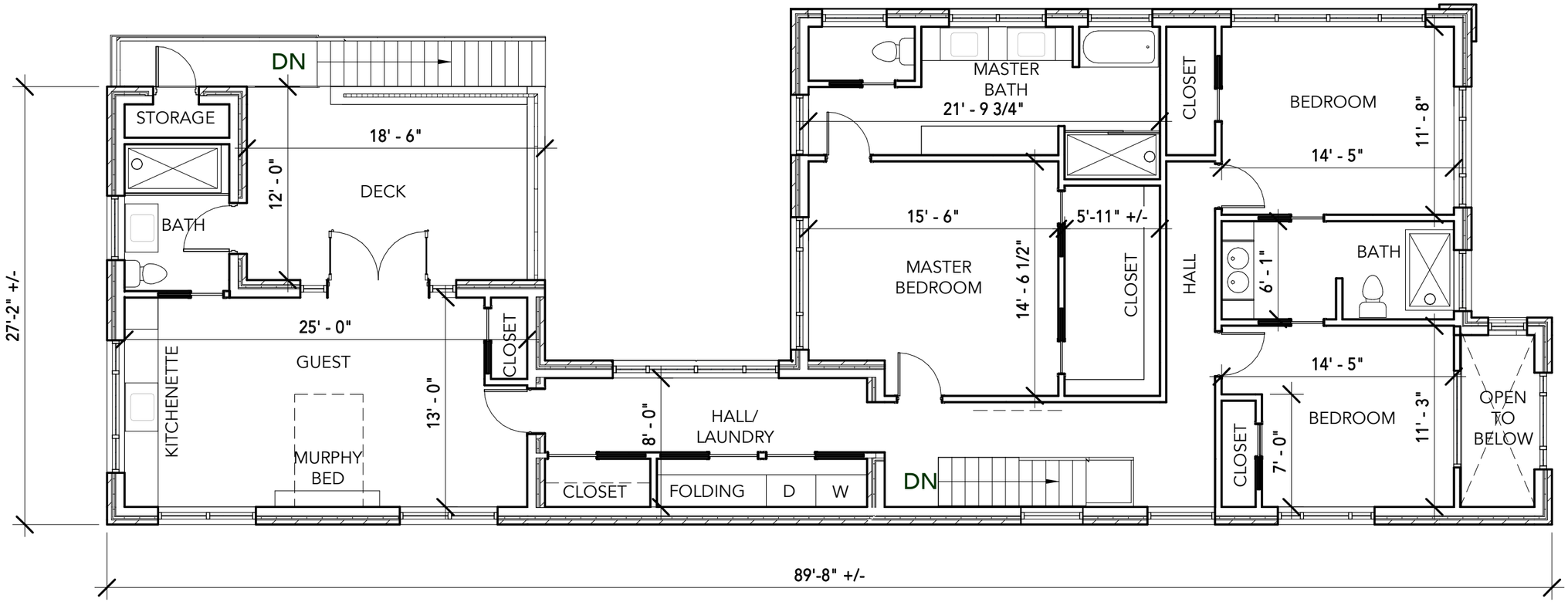


1 LEVEL 2 FLOOR PLAN

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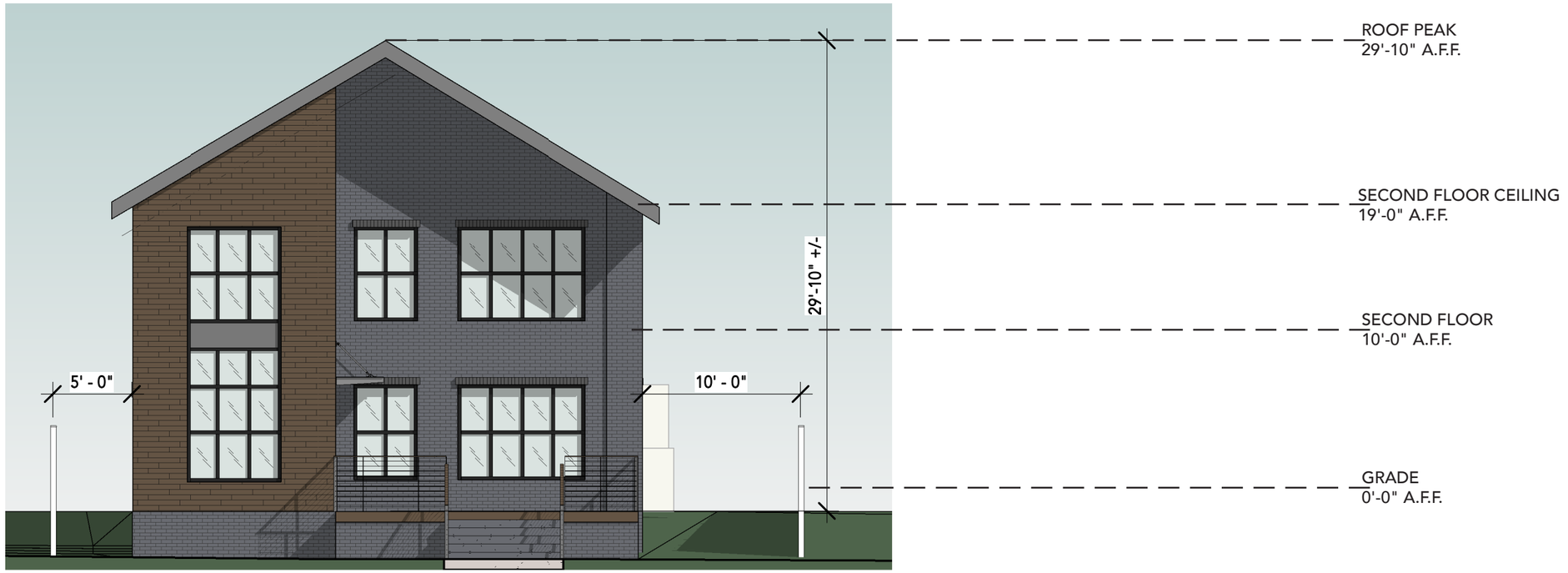
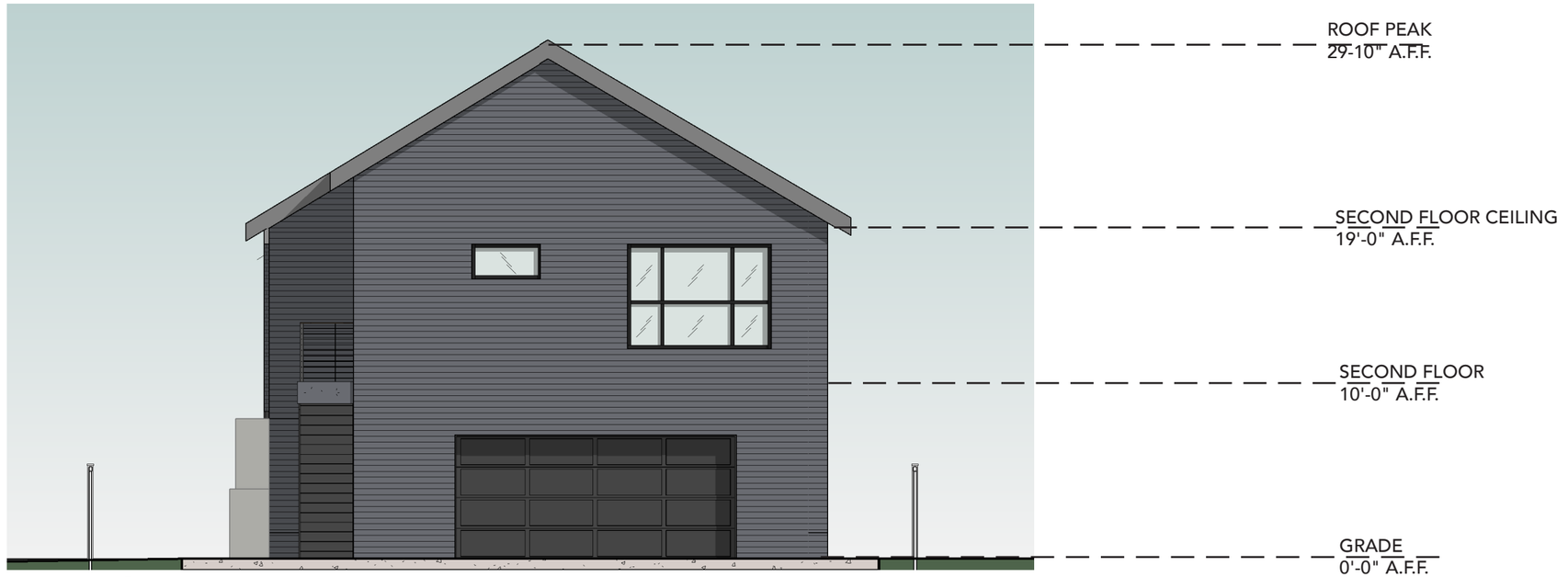
Project North




## SOUTH ELEVATION



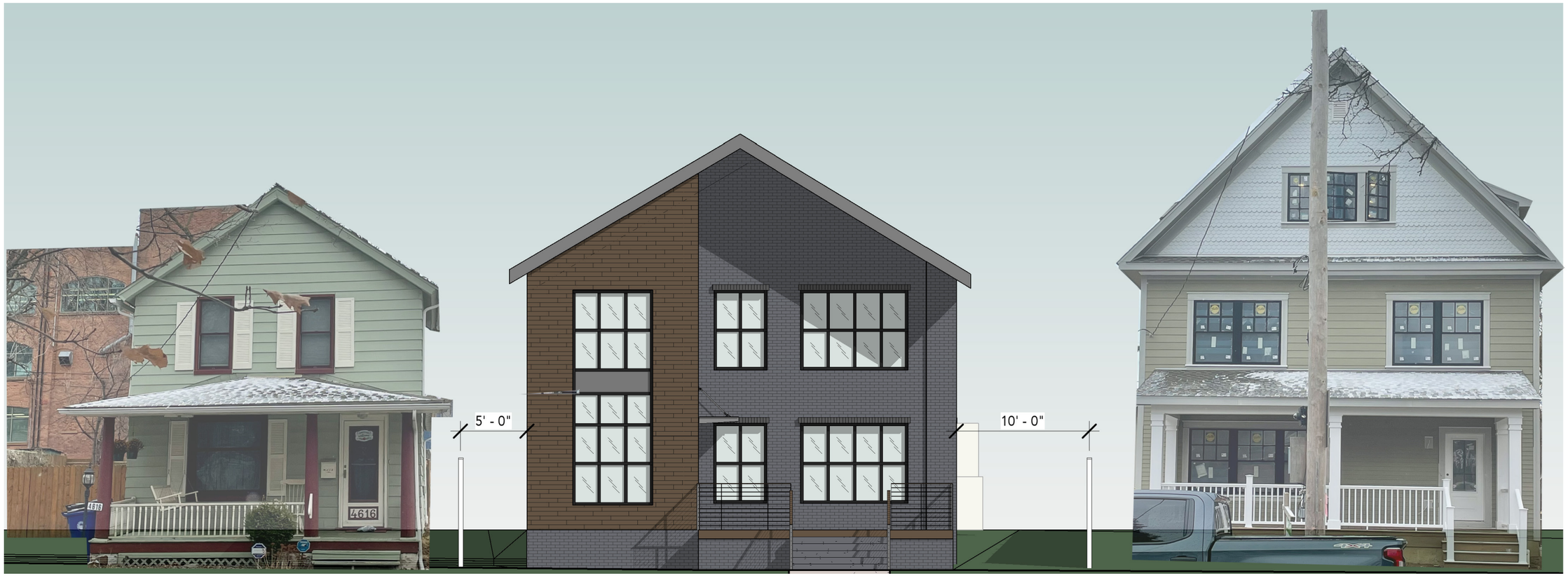

## EAST ELEVATION




NORTH ELEVATION




WEST ELEVATION




## SOUTH CONTEXTUAL ELEVATION



GREY MODULAR FACE BRICK, RUNNING BOND



GREY FIBER CEMENT PANELED SIDING



NICHIHA VINTAGE WOOD CEDAR FIBER CEMENT PANEL




4616





# Cleveland Landmarks Commission

## Design Review

March 24, 2022

# Ohio City Historic District
# Design Review Committee
## (Advisory committee to the Landmarks Commission)
## Certificate of Appropriateness Review

**Date**: 03-17-22 **File Number: 031722-1**
**Building / Project Name:** 4612 Clinton New Construction
**Property Address:** 4612 Clinton Ave **Parcel #:**
**Property Owner:** **Presenters:** Chris Rood
**Historic Designation:** ☐ Not Designated ☒ Local Landmarks District ☐ Landmark Building

**Specifications of work proposed:**

New construction – Final approval

**Recommendations of Design Review Committee:**

No quorum, no vote taken. Seen two times previous.

Margaret Lann, Marika Clark, Antonia Marinucci all present. Three present committee members agreed that if roof pitch was heightened, garage door and staircase color darkened, they would recommend approval.

**Notes/Comments:**

MC & ML appreciated the simplification of window choices and materials. ML stated that the grey brick material on foundation & darker mortar matches better than previous iteration of project.
AF & CL were not at meeting but provided written feedback, stating that the window style and roof pitch were still not acceptable and needed to be addressed.
Owner unwilling to concede on grey brick color or windows as is. Applicant has previously made significant changes to the project based on design review feedback.

**Design Review Committee Record:**

| | | | | | |
|---|---|---|---|---|---|
| **Alex Frondorf** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Antonia Marinucci** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Doug Wahl** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Margaret Lann** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Chris Loeser** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Marika Shiori-Clark** | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |

Required to present at Cleveland Landmarks Commission? ☐Yes ☐ No Date: na

The Ohio City Design Review Committee is staffed by, but independent of Ohio City Incorporated. The Ohio City Design Review Committee is an advisory body to the Cleveland Landmarks Commission, and while this certificate signifies a recommendation to the Cleveland Landmarks Commission it does not signify approval by the Cleveland Landmarks commission nor any other City department or board.

# Certificates of Appropriateness

March 24, 2022

**Case 22-026:** Gordon Square Historic District (Concept Plan 2/24/22)
**Waverly & Oak Phase 2 5416 Detroit Avenue**
New Construction Concept of a Pocket Park/Plaza and Petite Commercial Development
Ward 15: Spencer
Project Representatives: Justin Strizzi, Developer, Bond Street Group; Gary Ogrocki, Dimit Architects

# Certificates of Appropriateness

March 24, 2022

**Case 22-027:** Gordon Square Historic District (Concept Plan 2/24/22)
**Waverly & Oak Phase 2 5416 Detroit Avenue**
Demolition of a Commercial Building
Ward 15: Spencer
Project Representatives: Justin Strizzi, Developer, Bond Street Group; Gary Ogrocki, Dimit Architects


W 58TH ST
TILLMAN AVE
THE PROPERTY
DETROIT AVE
YES MLS


THE PROPERTY
DETROIT AVE
DETROIT AVE
YES-MLS




*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

BOND STREET

DIMITARCHITECTS

architecture + interiors + urban design

*December 2, 2021*









*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

BOND STREET

DIMIT ARCHITECTS

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*December 2, 2021*


2021 Fall
2021 Fall
0 30 60ft
1:500
CuyahogaGIS | USGS Nat

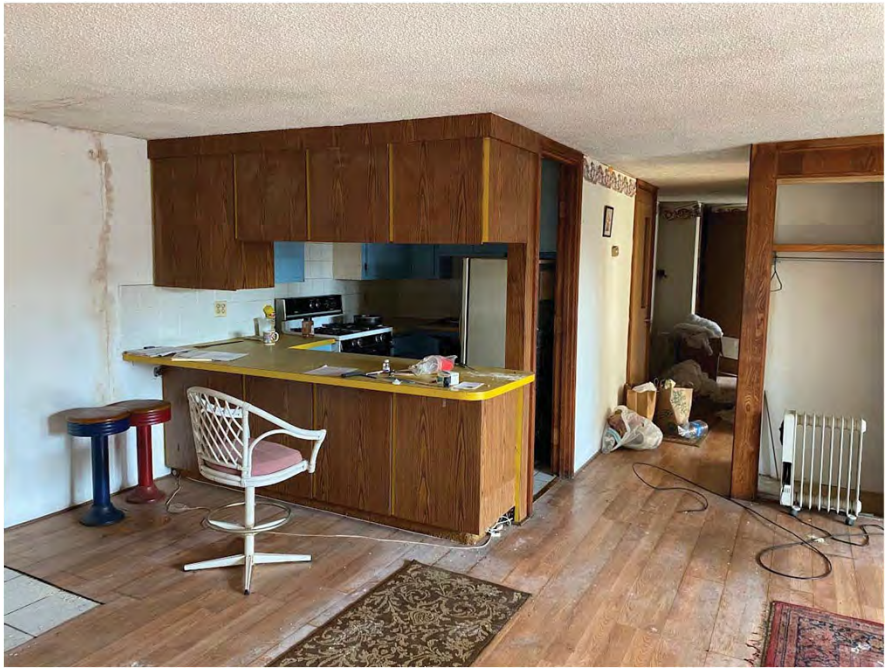

5416


SALE







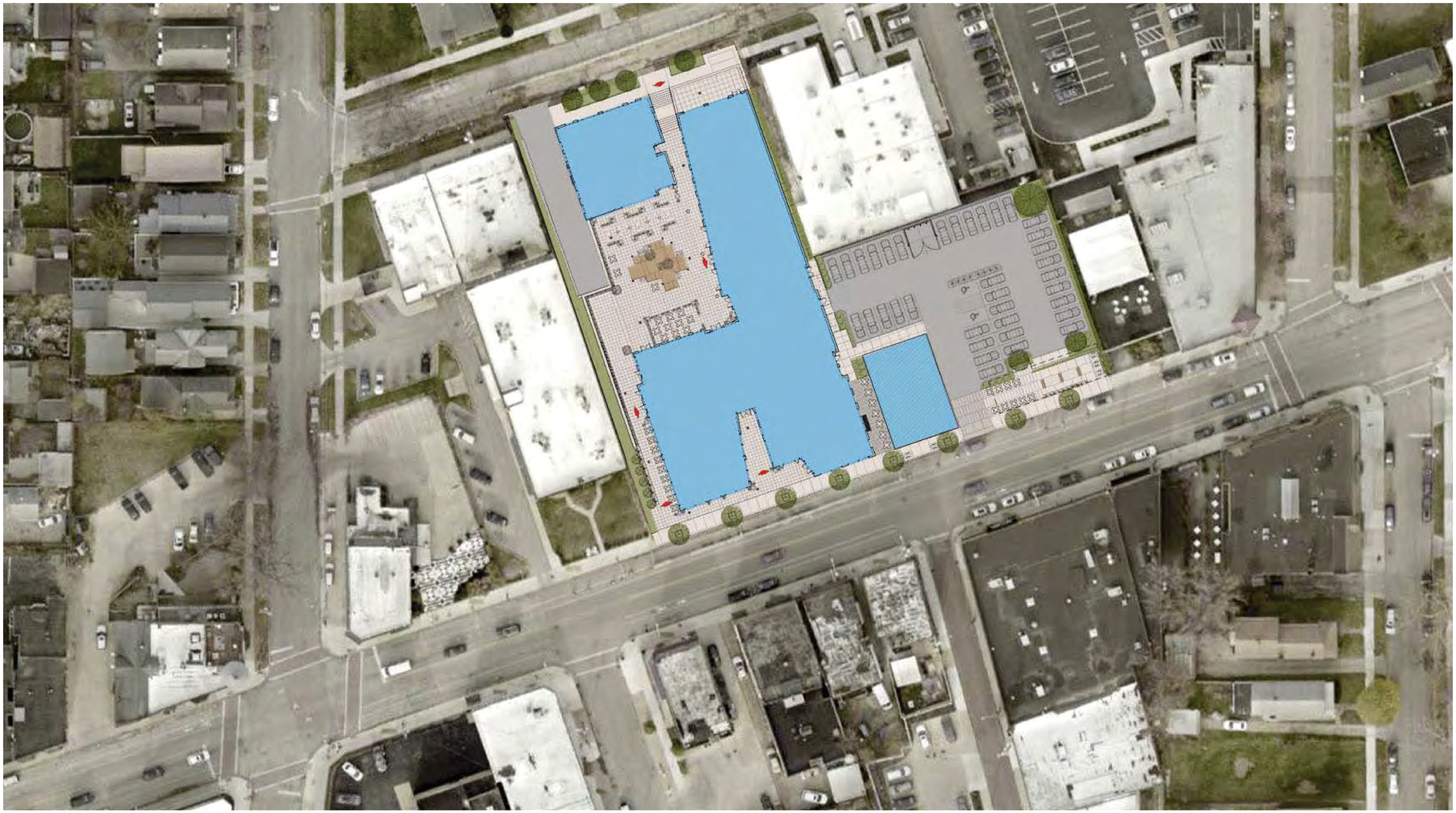


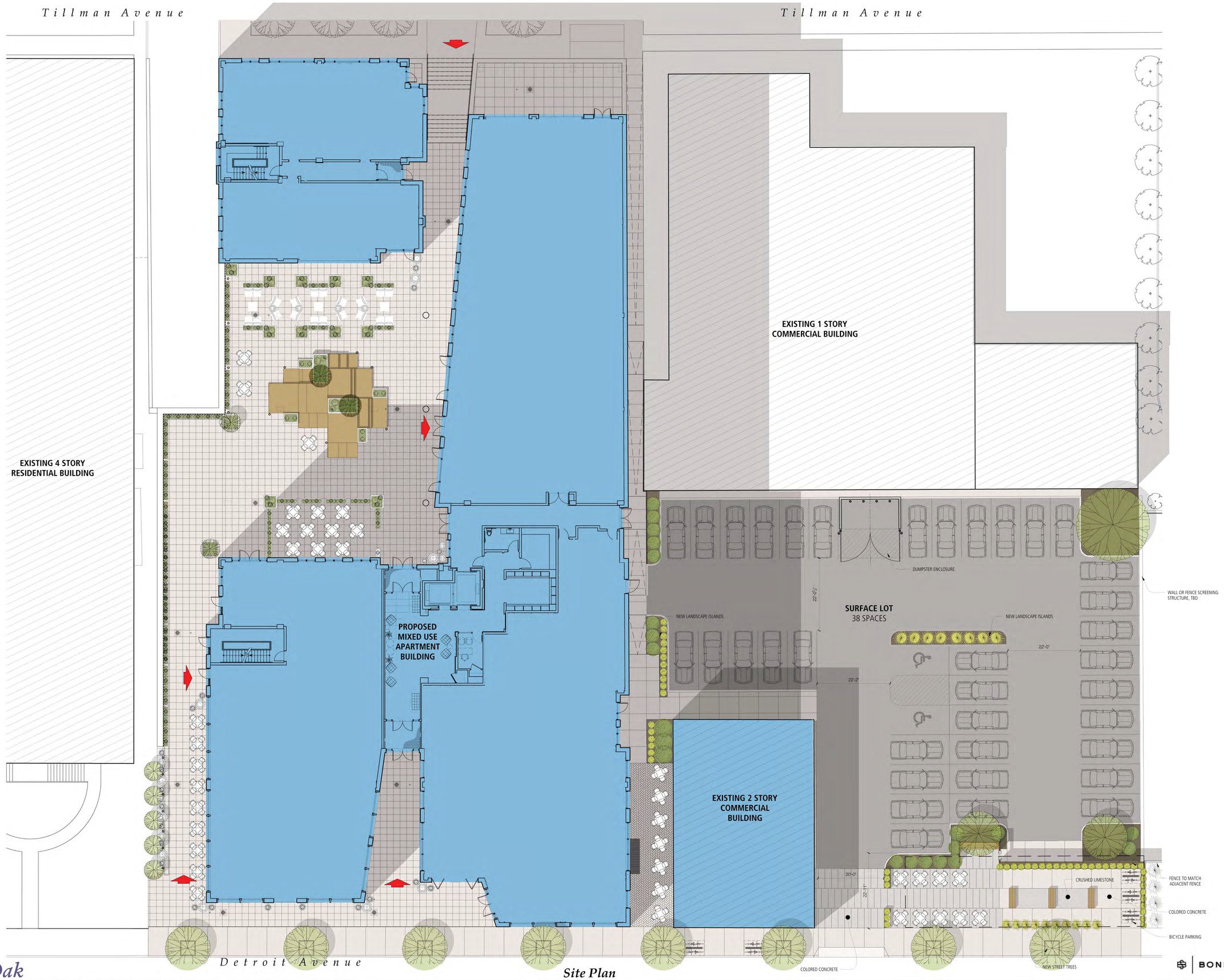













*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan***

*Scale: 3/32" = 1'-0"*

BOND STREET

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NEW LANDSCAPE ISLANDS

NEW LANDSCAPE ISLANDS

DUMPSTER ENCLOSURE

WALL OR FENCE SCREENING STRUCTURE, TBD

22'-0"

**SURFACE LOT**
37 SPACES

22'-0 1/2"

22'-2"

**EXISTING 2 STORY COMMERCIAL BUILDING**

20'-7"

36'-8 1/2"

NEW LANDSCAPE ISLANDS

CRUSHED LIMESTONE

32'-0"

FENCE TO MATCH ADJACENT FENCE

COLORED CONCRETE

BICYCLE PARKING

D e t r o i t  A v e n u e

COLORED CONCRETE

D e t r o i t  A v e n u e

NEW STREET TREES

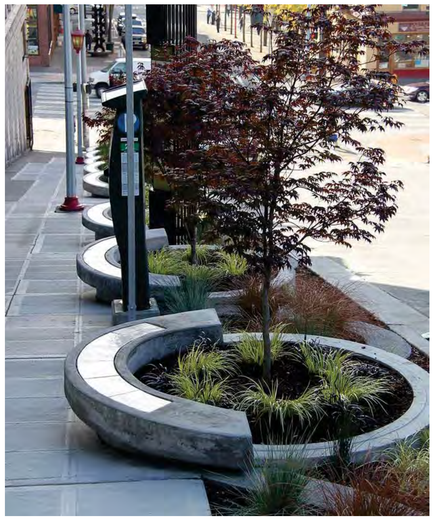
*Waverly & Oak*
*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan***
*Scale: 3/16" = 1'-0"*

BOND STREET

DIMIT ARCHITECTS
architecture + interiors + urban design

*March 2, 2022*









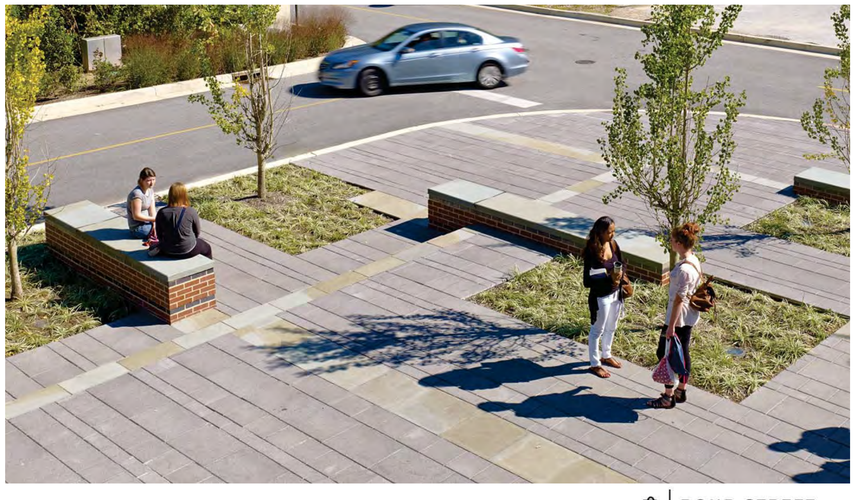












*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

**POCKET PARK / PLAZA**

BOND STREET

DIMITARCHITECTS
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*December 2, 2021*

NEW LANDSCAPE ISLANDS

NEW LANDSCAPE ISLANDS

DUMPSTER ENCLOSURE

WALL OR FENCE SCREENING STRUCTURE, TBD

22'-0"

**SURFACE LOT**
37 SPACES

22'-0 1/2"

22'-2"

**EXISTING 2 STORY COMMERCIAL BUILDING**

20'-7"

36'-6 1/2"

NEW LANDSCAPE ISLANDS

32'-0"

FENCE TO MATCH ADJACENT FENCE

COLORED CONCRETE

BICYCLE PARKING

POCKET PARK

CRUSHED LIMESTONE

NEW PARK BENCHES

NEW STREET TREES

D e t r o i t  A v e n u e

D e t r o i t  A v e n u e

*Waverly & Oak*
*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan - Option 1***

*Scale: 3/16" = 1'-0"*

BOND STREET

DIMIT ARCHITECTS
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*March 17, 2022*

NEW LANDSCAPE ISLANDS

NEW LANDSCAPE ISLANDS

DUMPSTER ENCLOSURE

WALL OR FENCE SCREENING STRUCTURE, TBD

22'-0"

**SURFACE LOT**
37 SPACES

22'-2"

22'-0½"

**EXISTING 2 STORY COMMERCIAL BUILDING**

20'-7"

36'-6½"

BICYCLE PARKING

NEW LANDSCAPE ISLANDS

NEW PARK BENCH

32'-0"

FENCE TO MATCH ADJACENT FENCE

POCKET PARK

D e t r o i t  A v e n u e

D e t r o i t  A v e n u e

NEW STREET TREES

*Waverly & Oak*
*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan - Option 2***

*Scale: 3/16" = 1'-0"*

BOND STREET

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*March 17, 2022*



Tillman Avenue

Tillman Avenue

EXISTING 4 STORY
RESIDENTIAL BUILDING

PROPOSED
MIXED USE
APARTMENT
BUILDING

EXISTING 1 STORY
COMMERCIAL BUILDING

DUMPSTER ENCLOSURE

WALL OR FENCE SCREENING
STRUCTURE, TBD

NEW LANDSCAPE ISLANDS

SURFACE LOT
38 SPACES

NEW LANDSCAPE ISLANDS

22'-0½"

22'-0"

22'-2"

EXISTING 2 STORY
COMMERCIAL
BUILDING

20'-0"

72'-6"

21'-6"

NEW (2) STORY
RETAIL STRUCTURE

NEW STREET TREES

Detroit Avenue

*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan***

*Scale: 3/32" = 1'-0"*

BOND STREET

DIMIT ARCHITECTS
architecture + interiors + urban design

*December 2, 2021*




*Waverly & Oak*

*Gordon Square Neighborhood, Cleveland, Ohio*

***Site Plan***

*Scale: 3/16" = 1'-0"*

BOND STREET

DIMIT ARCHITECTS
architecture + interiors + urban design

*March 2, 2022*





























*Waverly & Oak*
*Gordon Square Neighborhood, Cleveland, Ohio*

**PETITE COMMERCIAL**

BOND STREET

DIMIT ARCHITECTS
architecture + interiors + urban design

*December 2, 2021*

# Cleveland Landmarks Commission

## Design Review

March 24, 2022

## Gordon Square - Clifton West Design Review Committee
## Certificate of Appropriateness Review

**Date:** 3/9/2022 **File Number:**

**Building / Project Name: Waverly & Oak Phase 2**

**Property Address: 5416 Detroit Avenue**

**Property Owner: Bond Street**

**Historic Designation:** ☐ National Register ☒ Local Landmarks District ☐ Landmark Building

**Presenters:** Justin Strizzi, Taylor Hawkins (Bond Street), Gary Ogrocki (Dimit Architecture)

**Specifications of work proposed:** Proposal to demolish existing non-contributing structure, add temporary park, discuss potential options for future development on site. Setback increased to about 37' to meet PRO requirements (still needs conditional use)

**Recommendations of Design Review Committee:**

1) Recommend approval of the demolition of 5416 Detroit Avenue
2) Recommend approval of the site plan hardscape with the pocket park hardscape to be studied for more overall greenspace, more elements for site and seating with final landscape selections to return to the committee

**Design Review Committee:**

| | | | | | |
|---|---|---|---|---|---|
| **Jeff Blazek** | ☐ Not Present | ☒ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Brent Eysenbach** | ☐ Not Present | ☒ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Eric Fabian** | ☐ Not Present | ☒ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Timothy Karas** | ☒ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| **Krysta Pesarchick** | ☐ Not Present | ☒ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |
| | ☐ Not Present | ☐ In-Favor | ☐ Opposed | ☐ Table | ☐ Abstain |

**Non-Voting In Attendance**

Karl Brunjes (Administrator); Phil Kidd (Northwest Neighborhoods CDC)

Required to present at Cleveland Landmarks Commission? ☒Yes ☐ No Date: 3/24/2022

# Certificates of Appropriateness

March 24, 2022

**Case 22-028:** Ludlow Historic District
**Stewart Residence 13519 Corby Road**
Solar Panel Installation
Ward 4: Gray
Project Representatives: Ace Thompson, Fluent Solar

Fluent
SOLAR

February 8th 2022

Project Address: 13519 Corby Road, Cleveland, Ohio 44120
Project Name: Danielle Stewart

To Whom it may concern,

Plan check comments received – comments/corrections indicated below:

1. **Written Project Summary** - *Please see Sheet C-1 for the Scope Of Work located on the top left side of the sheet.*
2. **Site Location Map** - *Please See Sheet C-1 for the site location.*
3. **Site Context Plan** - *Please see Sheet PV-1 for the Site Plan Sheet.*
4. **Existing Conditions Plan** - *Please see sheet PV-1 for all site context*
5. **Site Plan** - *Please see sheet PV-1. North arrow, scale, legend , and all applicable notes can be found here.*
6. **Section/Elevation Drawings** - *Please see Sheet PV-2 for all Roof Info and structural info.*

Due to the Scope of work explained on Sheet C-1. The proposed project does not need access to any other requested information. Other information that is relevant such as Electrical Calculations and Structural Calculations can be found apart of the submitted Designs.

I hope that the required changes have been addressed to your satisfaction.

Thanks,

Dawson Armstrong | CAD Designer

866.736.1253
fluentsolar.com
2578 W 600 N Suite 100
Lindon, UT 84043

WYSSLING CONSULTING
CONNOISSEUR EXPERIENCE WITH SMALL BUSINESS VALUE

*Scott E. Wyssling, PE*
*Jon P. Ward, SE, PE*
*Gregory T. Elvestad, PE*

*76 North Meadowbrook Drive*
*Alpine, UT 84004*
*office (201) 874-3483*
*swyssling@wysslingconsulting.com*

January 15, 2022

Fluent Solar, LLC
2578 W 600 N
Lindon, UT 84042

Re: Engineering Services
Stewart Residence
13519 Corby Road, Cleveland OH
5.110 kW System

To Whom It May Concern:

We have received information regarding solar panel installation on the roof of the above referenced structure. Our evaluation of the structure is to verify the existing capacity of the roof system and its ability to support the additional loads imposed by the proposed solar system.

***A. Site Assessment Information***

1. Site visit documentation identifying attic information including size and spacing of framing for the existing roof structure.
2. Design drawings of the proposed system including a site plan, roof plan and connection details for the solar panels. This information will be utilized for approval and construction of the proposed system.

***B. Description of Structure:***

| | |
|---|---|
| ***Roof Framing:*** | 2 x 6 dimensional lumber spaced at 24” on center |
| ***Roof Material:*** | Composite Asphalt Shingles |
| ***Roof Slope:*** | 25 degrees |
| ***Attic Access:*** | Accessible |
| ***Lumber type:*** | Assumed Douglas Fir |
| ***Foundation:*** | Permanent |

***C. Loading Criteria Used***

- **Dead Load**
  - Existing Roofing and framing = 7 psf
  - New Solar Panels and Racking = 3 psf
  - TOTAL = 10 PSF
- **Live Load** = 20 psf (reducible) – 0 psf at locations of solar panels
- **Ground Snow Load** = 20 psf
- **Wind Load** based on ASCE 7-16
  - Ultimate Wind Speed = 115 mph (based on Risk Category II)
  - Exposure Category C

*Analysis performed of the existing roof structure utilizing the above loading criteria is in accordance with the 2019 RCO, including provisions allowing existing structures to not require strengthening if the new loads do not exceed existing design loads by 105% for gravity elements and 110% for seismic elements. This analysis indicates that the existing framing will support the additional panel loading without damage, if installed correctly.*

***D. Solar Panel Anchorage***

1. The solar panels shall be mounted in accordance with the most recent Unirac installation manual. If during solar panel installation, the roof framing members appear unstable or deflect non-uniformly, our office should be notified before proceeding with the installation.
2. The maximum allowable withdrawal force for a $^{5}/_{16}$" lag screw is 235 lbs per inch of penetration as identified in the National Design Standards (NDS) of timber construction specifications. Based on a minimum penetration depth of 2½", the allowable capacity per connection is greater than the design withdrawal force (demand). Considering the variable factors for the existing roof framing and installation tolerances, the connection using one $^{5}/_{16}$" diameter lag screw with a minimum of 2½" embedment will be adequate and will include a sufficient factor of safety.
3. Considering the wind speed, roof slopes, size and spacing of framing members, and condition of the roof, the panel supports shall be placed no greater than 48" on centers.
4. Panel supports connections shall be staggered to distribute load to adjacent framing members.

Based on the above evaluation, this office certifies that with the racking and mounting specified, the existing roof system will adequately support the additional loading imposed by the solar system. This evaluation is in conformance with the 2019 RCO, current industry standards, and is based on information supplied to us at the time of this report.

Should you have any questions regarding the above or if you require further information do not hesitate to contact me.

Very truly yours,

Scott E. Wyssling, PE
Ohio License No. 84884



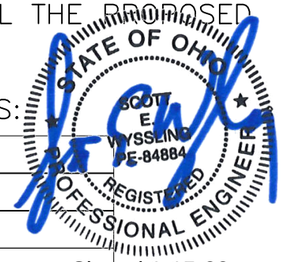
| DC SYSTEM SIZE: | 5.11 KW |
|---|---|

# SCOPE OF WORK:

FLUENT SOLAR INSTALL THE PROPOSED GRID-TIED PHOTOVOLTAIC SYSTEM. FLUENT SOLAR WILL BE RESPONSIBLE FOR COLLECTING THE NEEDED SITE INFORMATION TO DESIGN AND INSTALL THE PROPOSED PHOTOVOLTAIC SYSTEM.

THE PHOTOVOLTAIC SYSTEM INCLUDES:

| |
|---|
| ( 14 ) URE – F6M365E7G-BB (CS-1) |
| ( 1 ) SOLAREDGE – SE3800H-US (CS-2) |
| ( 14 ) SOLAREDGE – P401 (CS-3) |
| |




Signed 1-15-22

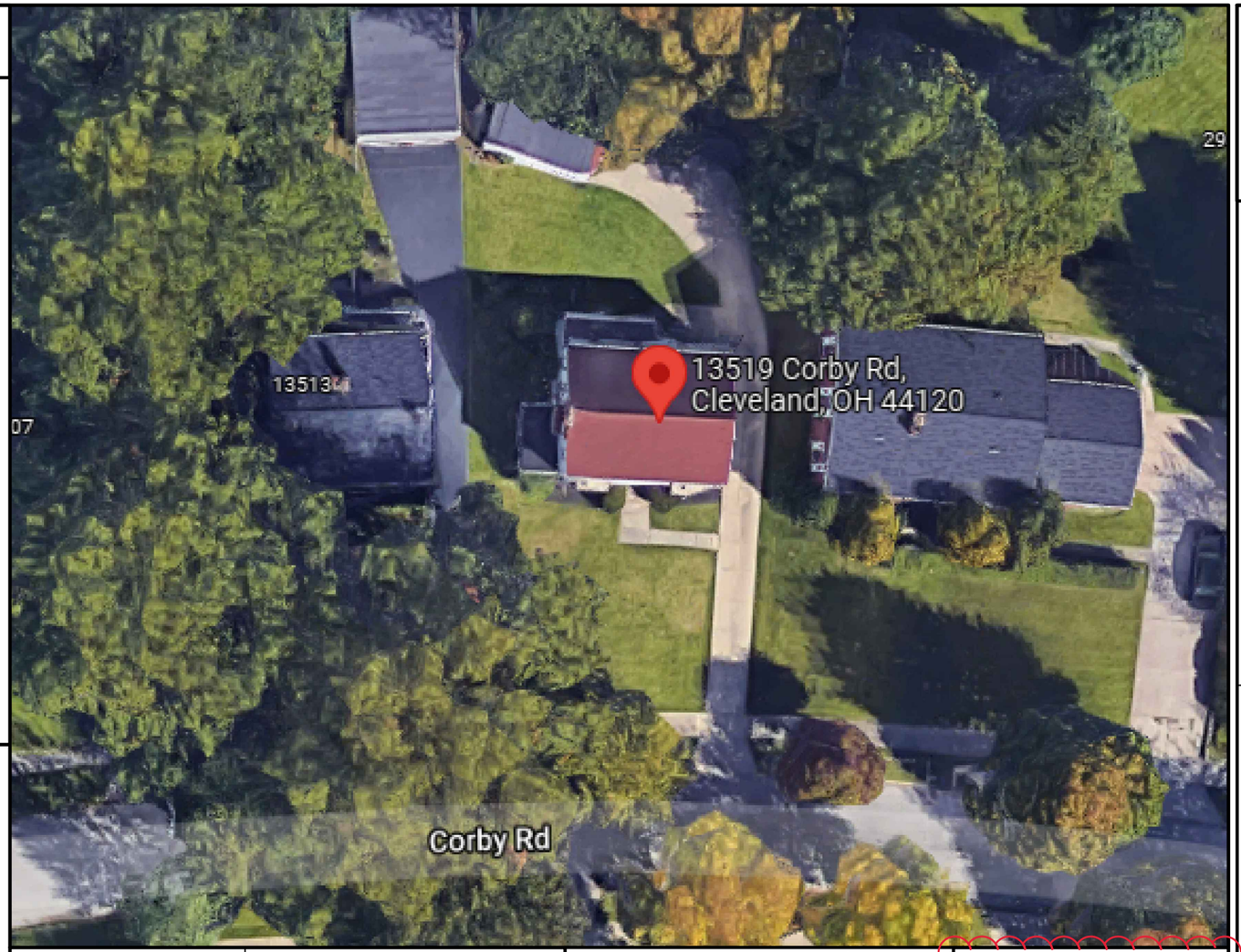
THE MODULES SHALL BE FLUSH MOUNTED USING

| |
|---|
| APPROX. ( 48 ) QUICKBOLT #16318 MOUNTS |
| ON IRONRIDGE XR-10-168A RAIL |

THE PHOTOVOLTAIC SYSTEM SHALL BE INTERCONNECTED BY PERFORMING A RATED BACK FED TAP INTO THE EXISTING 125 A MAIN SERVICE PANEL

INSTALL SHALL INCLUDE:

- MODULE INSTALLATION
- OPTIMIZER INSTALLATION
- INVERTER INSTALLATION
- MOUNTING AND RACKING INSTALLATION
- AC/DC DISCONNECTS
- GROUNDING AND PV GROUNDING ELECTRODE AND BONDING TO EXISTING GEC
- SYSTEM WIRING
- NET METERING (IF NEEDED)
- PV LABELS (THAT ARE APPLICABLE TO PROJECT)




| | |
|---|---|
| ASCE 7-10 WIND SPEED: | 90 MPH, EXPOSURE CATEGORY C |
| GROUND SNOW LOAD: | 20 PSF, EXPOSURE CATEGORY C |

STAMPS (IF NEEDED)

CONTENTS:


| | |
|---|---|
| C-1 | COVER PAGE |
| PV-1 | SITE PLAN |
| PV-2 | ROOF INFO |
| PV-3 | SITE PHOTOS |
| PV-4 | STREET VIEW |
| E-1 | 3-LINE DIAGRAM |
| E-2 | LABELS |
| E-2.1 | LABELS LOCATION |
| E-3 | ELEC CALCS AND EQUIPMENT INFO |
| M-1 | MOUNT |
| M-2 | MOUNT CONT. |
| EQ-1 | EQUIPMENT |
| EQ-2 | EQUIP. CONT. |
| EQ-3 | EQUIP. CONT. |
| EQ-4 | EQUIP. CONT. |
| EQ-5 | EQUIP. CONT. |
| CS-1 | MODULE |
| CS-2 | OPTIMIZER |
| CS-3 | INVERTER |
| PL-1 | PLACARD |


## GENERAL NOTES

1. EACH MODULE TO BE GROUNDED USING THE SUPPLIED CONNECTION POINT PER MANUFACTURER'S REQUIREMENTS. ALL SOLAR MODULES, EQUIPMENT, AND METALLIC COMPONENTS ARE TO BE BONDED. IF THE EXISTING GROUNDING ELECTRODE SYSTEM CANNOT BE VERIFIED OR IS ONLY METALLIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE.
2. ALL PLAQUES AND SIGNAGE REQUIRED BY THE ADOPTED NATIONAL ELECTRIC CODE SHALL BE METAL OR PLASTIC, ENGRAVED OR MACHINED IN A CONTRASTING COLOR TO THE PLAQUE/LABEL. ALL PLAQUES/LABELS SHALL BE UV & WEATHER RESISTANT (SEE PV-2).
3. DC CONDUCTORS SHALL BE RUN IN EMT AND/OR MC (METAL CLAD CABLE) AND SHALL BE LABELED A MINIMUM OF EVERY 10' (SEE E2-E2.1)
4. EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136(A).
5. CONFIRM LINE SIDE VOLTAGE AT ELECTRIC UTILITY SERVICE PRIOR TO CONNECTING INVERTER. VERIFY SERVICE VOLTAGE IS WITHIN INVERTER VOLTAGE OPERATIONAL RANGE.
6. ALL SIGNAGE MUST BE PERMANENTLY ATTACHED AND BE WEATHER/SUNLIGHT RESISTANT AND CANNOT BE HAND-WRITTEN(SEE E2-E2.1)
7. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT EXPANSION JOINTS AND ANCHOR CONDUIT RUNS AS REQUIRED PER NEC.
8. ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SUCH USE, AND FOR ROOF-MOUNTED SYSTEMS, WIRING MUST BE PERMANENTLY AND COMPLETELY HELD OFF OF THE ROOF SURFACE. NEC 110.2 – 110.4 / 300.4
9. ALL PV METERS AND RAPID SHUTDOWNS TO BE WITHIN 5' OF ANOTHER. AC DISCONNECT TO BE WITHIN 10' OF UTILITY METER. PV METER CENTER OF GLASS TO BE AT 5'
10. PV METERS TO BE INSTALLED CORRECTLY, SUPPLIED FROM THE TOP JAWS.
11. ALL ROOF PENETRATIONS MUST BE FLASHED. SIMPLY CAULKING DOES NOT SUFFICE.
12. ALL DC CONDUCTORS RUN INSIDE OF THE STRUCTURE SHALL BE INSTALLED A MINIMUM OF 18" BELOW THE ROOF DECK.
13. ALL WORK SHALL COMPLY WITH THE 2017 OBC AND 2019 RCO.
14. ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2017 NATIONAL ELECTRIC CODE.
15. EQUIPMENT MAY BE SUBSTITUTED FOR SIMILAR EQUIPMENT BASED ON AVAILABILITY. SUBSTITUTED EQUIPMENT SHALL COMPLY WITH DESIGN CRITERIA


Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253


| | |
|---|---|
| SYSTEM SIZE: | 5.11 KW (E-1) |
| | ( 14 ) URE – F6M365E7G-BB (CS-1) |
| | ( 1 ) SOLAREDGE – SE3800H-US (CS-2) |
| | ( 14 ) SOLAREDGE – P401 (CS-3) |
| | ROOF TYPE: COMP SHINGLE (PV-2) |
| | RAFTERS, 2X4 @ 24" (PV-2) |
| | INTERCONNECTION METHOD: RATED BACK FED TAP |
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA

DESIGNED ON
1/14/2022

COVER PAGE

C-1

LEGEND:

UM =UTILITY METER

MSP =MAIN SERVICE PANEL

AC =AC DISCONNECT

AC/DC =INVERTER

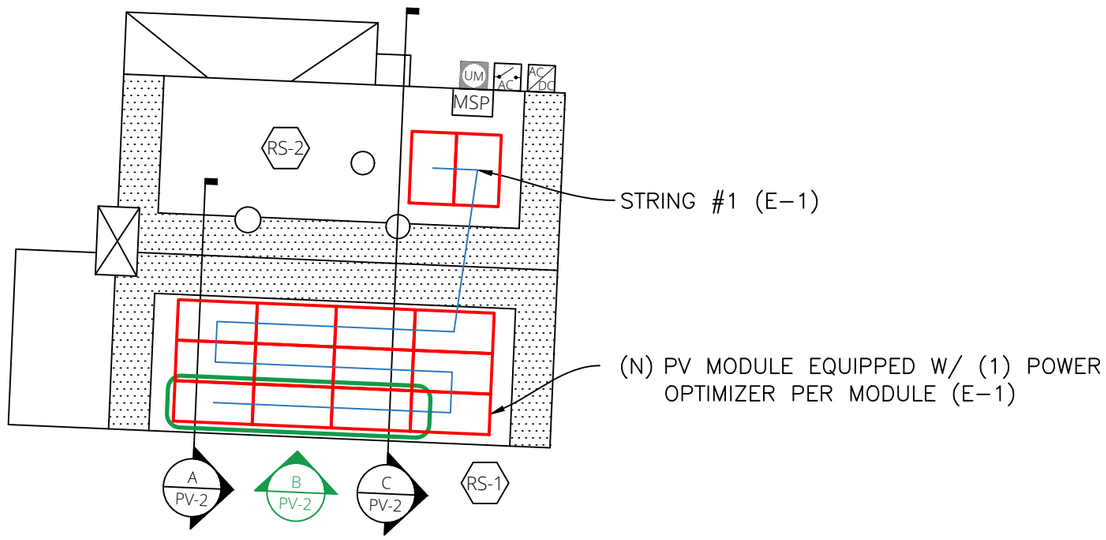
INVERTER POWER RATING: 3.80 kW
PANEL POWER RATING: 365 W

TRUE NORTH

| | TILT | AZIMUTH |
|---|---|---|
| ROOF SECTION 1 | 25 | 182 |
| ROOF SECTION 2 | 25 | 2 |
| ROOF SECTION 3 | N/A | N/A |
| ROOF SECTION 4 | N/A | N/A |
| ROOF SECTION 5 | N/A | N/A |
| ROOF SECTION 6 | N/A | N/A |

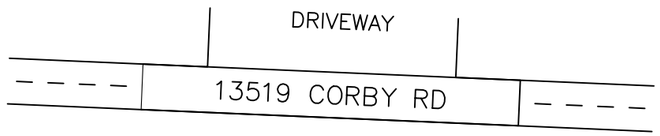
**DESIGN ADDENDUMS TO STANDARD TEMPLATE BASED ON CITY, STATE, UTILITY, AHJ, OR PREVIOUS PLAN REVIEWER COMMENTS IF THERE ARE CONFLICTING NOTES, ADDENDUMS TAKE PRECEDENCE OVER STANDARD TEMPLATE NOTES**

ADDENDUM #32 - 1: CALCULATION FOR OCPD TO THE AC OUTPUT INVERTER @125%: 16A(INVERTER MAXIMUM OUTPUT CURRENT) x 1.25 =20A
ADDENDUM #32 - 2: CALCULATIONS FO RTHE SUM OF THE MAIN OCPD AND THE INVERTER @120%:
ADDENDUM #32 - 3: CALCULATIONS FOR THE DERATING OF CONDUCTORS IN RACEWAY FOR ROOFTOP PV SYSTEMS: SEE EE-3 PAGE






Signed 1-15-22




## SITE PLAN NOTES:

- VERIFY ALL OBSTRUCTIONS IN THE FIELD.
- VERIFY ALL DIMENSIONS IN THE FIELD.
- PROVIDE RAIL SPLICES AS REQUIRED BY MANUFACTURER'S GUIDELINES.
- NO SIGNIFICANT SHADING WILL RESULT FROM EXISTING ROOF OBSTRUCTIONS.
- PV MODULES CANNOT BE INSTALLED OVER OR BLOCK ATTIC VENTS, PLUMBING VENTS, FURNACE OR WATER HEATER VENTS ETC.
- WHERE INDICATED ON PLAN, MIN. DIMENSIONS ARE REQUIRED PER THE "SOLAR PV INSTALLATION GUIDELINE" PUBLISHED BY THE OFFICE OF THE STATE FIRE MARSHAL.
- SCALE $\frac{3}{32}$"=1'
- ALL PV METERS AND RAPID SHUTDOWNS TO BE WITHIN 5' OF ANOTHER. AC DISCONNECT TO BE WITHIN 10' OF UTILITY METER. PV METER CENTER OF GLASS TO BE AT 5'

HATCHED AREA WILL PROVIDE A 3' FIRECODE PATHWAY TO COMPLY WITH IFC 605.11.3.2.1


Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253


| | |
|---|---|
| SYSTEM SIZE: 5.11 KW (E-1) | |
| ( 14 ) URE - F6M365E7G-BB (CS-1) | |
| ( 1 ) SOLAREDGE - SE3800H-US (CS-2) | |
| ( 14 ) SOLAREDGE - P401 (CS-3) | |
| ROOF TYPE: COMP SHINGLE (PV-2) | |
| RAFTERS, 2X4 @ 24" (PV-2) | |
| INTERCONNECTION METHOD: RATED BACK FED TAP | |
| CUSTOMER LAST NAME: STEWART | |
| ADDRESS: 13519 CORBY RD | |
| CITY: CLEVELAND | |
| STATE: OH | |
| ZIP: 44120 | |
| JURISDICTION: Cleveland | |
| UTILITY COMPANY: FIRST ENERGY | |

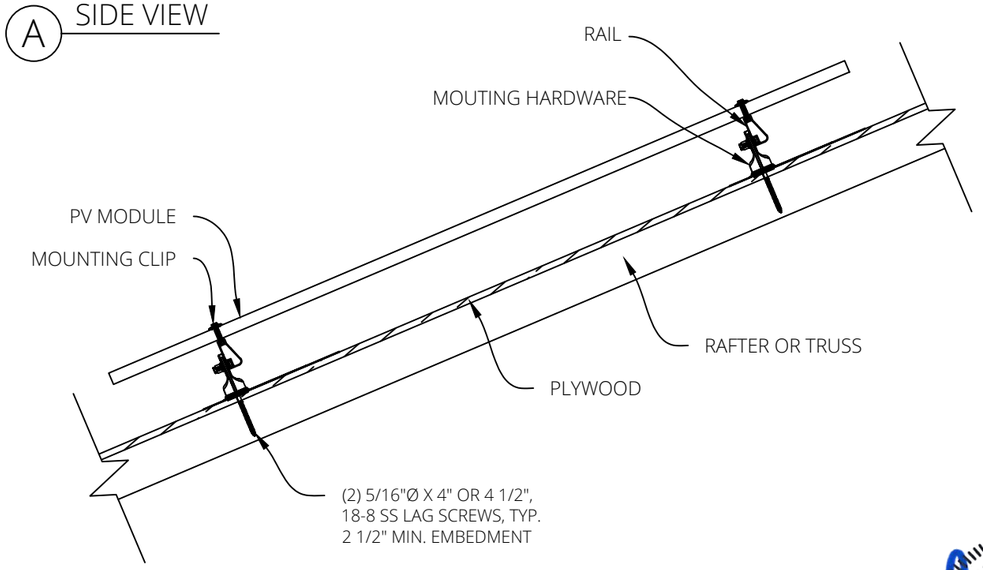
DESIGNED BY: DA

DESIGNED ON
1/14/2022

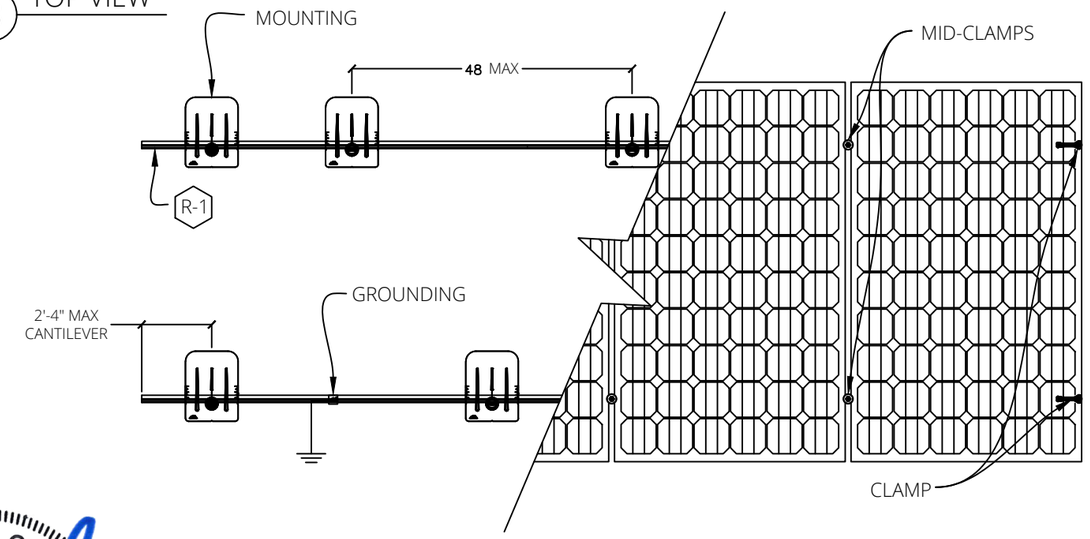
SITE PLAN

PV-1

## A SIDE VIEW

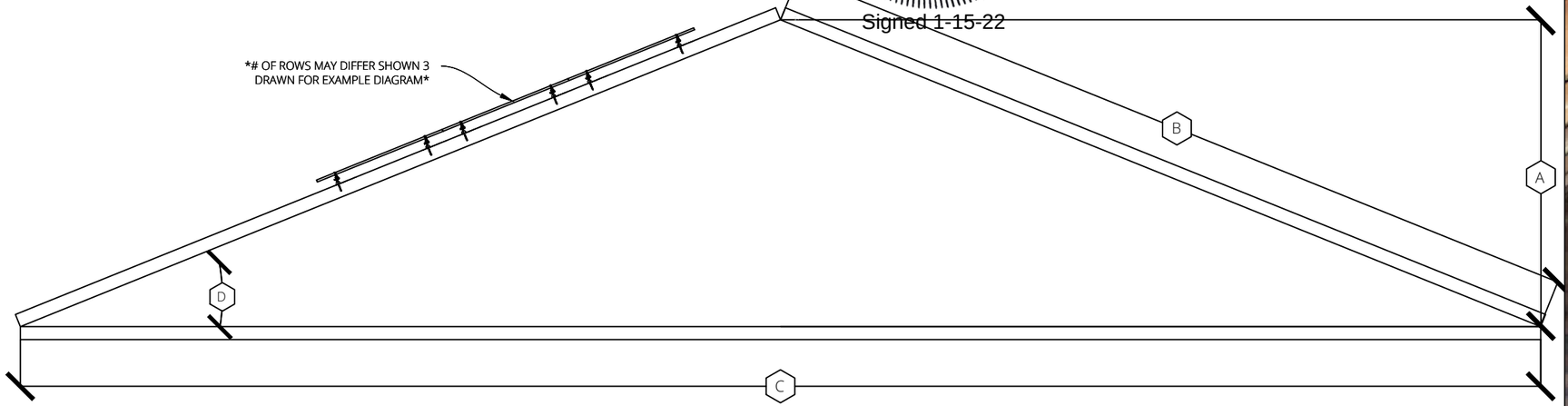


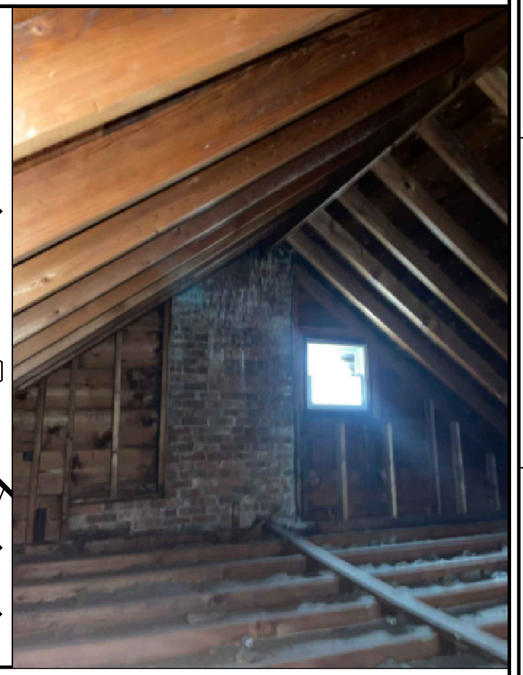

## B TOP VIEW




## C ATTIC INFO

NOT TO SCALE



STATE OF OHIO
SCOTT E. WYSSLING
PE-84884
REGISTERED
PROFESSIONAL ENGINEER

Signed 1-15-22

| RAFTERS | SIZE: | 2X6 | SPACING: | 24 |
|---|---|---|---|---|

| ROOF INFO IN INCHES & DEGREES | | TAG ID |
|---|---|---|
| ROOF HEIGHT: | 76 | A |
| ROOF FACE SPAN: | 179 | B |
| ROOF LENGTH: | 324 | C |
| ROOF TILT: | 25 | D |

| PV ARRAY STRUCTURAL INFO | | | |
|---|---|---|---|
| TOTAL PV MODULE COUNT: | (TOTAL NUMBER OF MODULES BEING INSTALLED) | 14 | MODULES |
| APPROX. ATTACHMENT POINTS: | (ROUND UP (TOTAL ROWS WIDTH) / (MOUNT SPACING)) +2 | 48 | MOUNTS |
| INDIVIDUAL ARRAY AREA: | (MODULE LENGTH) X (MODULE WIDTH) | 19.88 | FT^2 |
| TOTAL ARRAY AREA: | (INDIVIDUAL ARRAY AREA) X (TOTAL MODULE COUNT) = FT^2 | 278.27 | FT^2 |
| TOTAL ROOF AREA: | (ROOF AREA TOTAL) = FT^2 | 871 | FT^2 |
| % ARRAY/ROOF: | (AREA AREA) / (ROOF AREA) = % | 31.9 | % |
| TOTAL ARRAY WEIGHT: | (TOTAL MODULE COUNT) X (MODULE WEIGHT) = LBS | 604.94 | LBS |
| TOTAL DISTRIBUTED LOAD ON ROOF: | (TOTAL ARRAY WEIGHT) / (ARRAY AREA) = LBS / FT^2 | 2.17 | LBS / FT^2 |
| LOAD ON EACH MOUNT | (TOTAL ARRAY WEIGHT) / (TOTAL NUMBER OF ATTACHMENTS) | 12.60 | LBS / ATTACH. |

## GENERAL STRUCTURAL NOTES:

THE FOLLOWING CALCULATIONS ARE INITIAL CALCULATIONS BASED OFF OF THE SITE SURVEY INFORMATION, AND THE EQUIPMENT CUT SHEETS. REFER TO STRUCTURAL LETTER FOR FINAL CALCULATIONS, SNOW AND WIND SPEEDS


Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253


| | |
|---|---|
| SYSTEM SIZE: | 5.11 KW (E-1) |
| | ( 14 ) URE - F6M365E7G-BB (CS-1) |
| | ( 1 ) SOLAREDGE - SE3800H-US (CS-2) |
| | ( 14 ) SOLAREDGE - P401 (CS-3) |
| | ROOF TYPE: COMP SHINGLE (PV-2) |
| | RAFTERS, 2X4 @ 24" (PV-2) |
| | INTERCONNECTION METHOD: RATED BACK FED TAP |
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA

DESIGNED ON

1/14/2022

ROOF INFO

PV-2







Fluent
SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

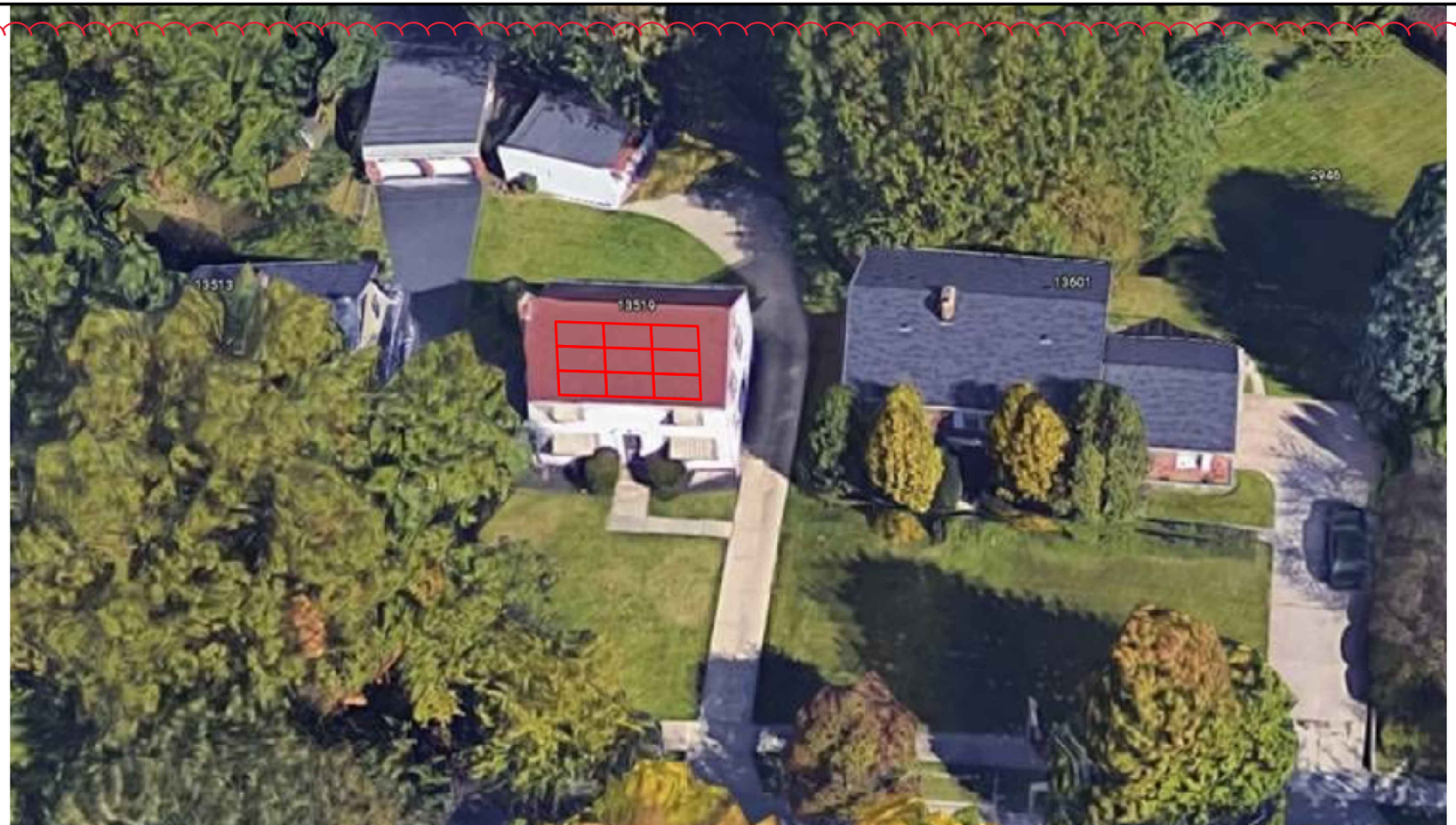
| | |
|---|---|
| SYSTEM SIZE: 5.11 KW (E-1) | |
| ( 14 ) URE - F6M365E7G-BB (CS-1) | |
| ( 1 ) SOLAREDGE - SE3800H-US (CS-2) | |
| ( 14 ) SOLAREDGE - P401 (CS-3) | |
| ROOF TYPE: COMP SHINGLE (PV-2) | |
| RAFTERS, 2X4 @ 24" (PV-2) | |
| INTERCONNECTION METHOD: RATED BACK FED TAP | |
| CUSTOMER LAST NAME: STEWART | |
| ADDRESS: 13519 CORBY RD | |
| CITY: CLEVELAND | |
| STATE: OH | |
| ZIP: 44120 | |
| JURISDICTION: Cleveland | |
| UTILITY COMPANY: FIRST ENERGY | |

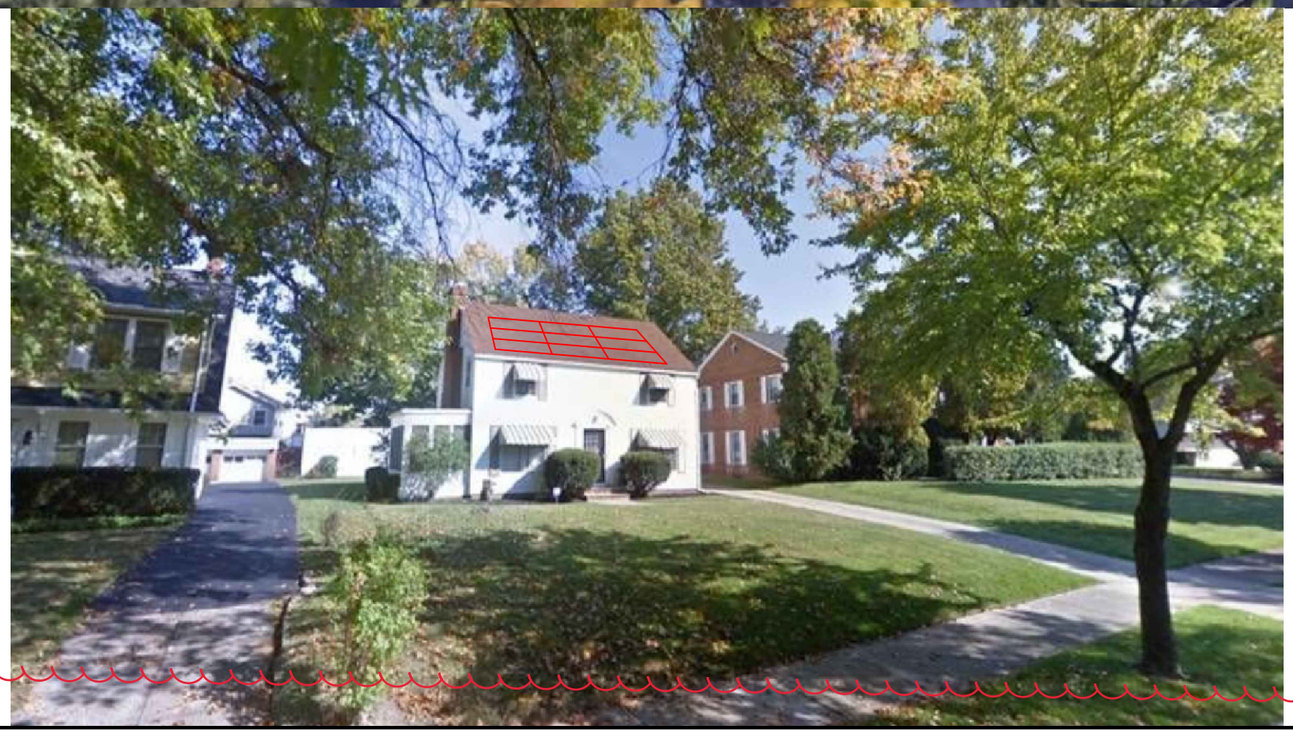
DESIGNED BY: DA

DESIGNED ON
1/14/2022

SITE PHOTOS

PV-3



ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

| | |
|---|---|
| SYSTEM SIZE: 5.11 KW (E-1) | |
| ( 14 ) URE - F6M365E7G-BB (CS-1) | |
| ( 1 ) SOLAREDGE - SE3800H-US (CS-2) | |
| ( 14 ) SOLAREDGE - P401 (CS-3) | |
| ROOF TYPE: COMP SHINGLE (PV-2) | |
| RAFTERS, 2X4 @ 24" (PV-2) | |
| INTERCONNECTION METHOD: RATED BACK FED TAP | |

| | |
|---|---|
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA

DESIGNED ON
1/14/2022

STREET VIEW

PV-4

## CONDUCTOR SCHEDULE

| | CONDUCTORS | | | | GROUND | | | CONDUIT |
|---|---|---|---|---|---|---|---|---|
| TAG ID | WIRES IN CONDUIT | WIRE AWG | TYPE, MATERIAL | WIRE 90°C (194°F) AMPERAGE RATING TABLE 310.15 (B)(16) | SIZE | RATING TABLE 250.122 | TYPE, MATERIAL | |
| A | 3 | #10 AWG | PV CABLE, CU | 40 | #6 AWG | 100 | BARE, CU | 3/4" EMT |
| B | 3 | #10 AWG | THWN-2, CU | 40 | #10 AWG | 20 | THWN-2, CU | 3/4" EMT |
| C | 4 | #10 AWG | THWN-2, CU | 40 | #10 AWG | 20 | THWN-2, CU | 3/4" EMT |
| D | 4 | #6 AWG | THWN-2, CU | 75 | #8 AWG | 60 | THWN-2, CU | 3/4" EMT |

* TAG D ONLY IF APPLICABLE *

| AC DISCONNECT SIZE: | ENCLOSURE TYPE: | SPECIAL NOTES: |
|---|---|---|
| 30A FUSED | NEMA 3R | 20A FUSES |

| ELECTRICAL EQUIPMENT | | | |
|---|---|---|---|
| EE-1 | EXISTING | 125A | BUS BAR RATING |
| EE-2 | EXISTING | 100A | MAIN BREAKER RATING |
| EE-3 | NEW | 100A | RATED BACK FED TAP |
| EE-4 | | | |
| EE-5 | | | |

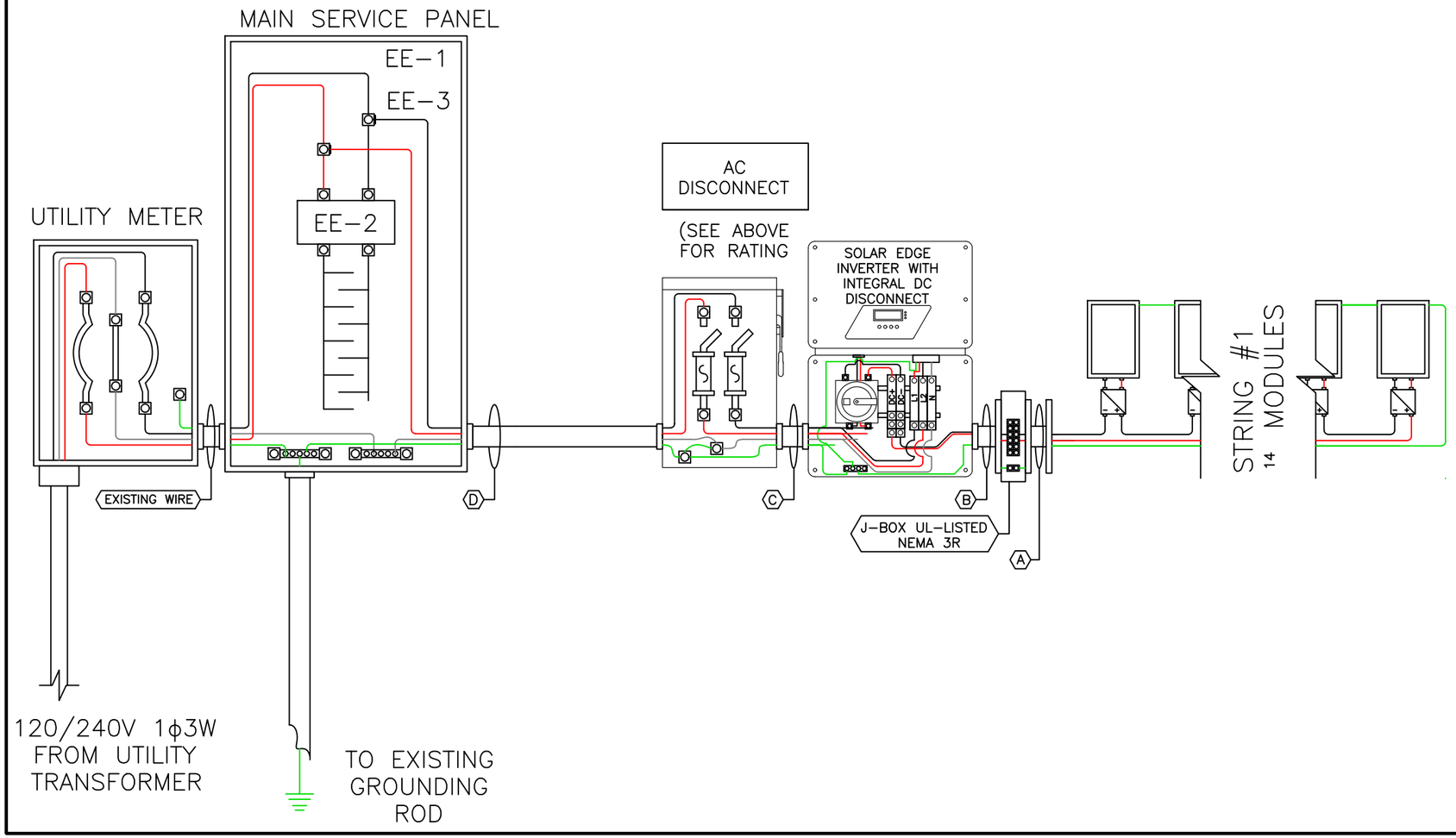
PRODUCTION METER:

NO PM REQUIRED

ALL PV METERS (IF REQUIRED) AND RAPID SHUTDOWNS TO BE WITHIN 5' OF ANOTHER

AC DISCONNECT TO BE WITHIN 10' OF UTILITY METER

INVERTER POWER RATING: 3.80 kW
PANEL POWER RATING: 365 W




**DESIGN ADDENDUMS TO STANDARD TEMPLATE BASED ON CITY, STATE, UTILITY, AHJ, OR PREVIOUS PLAN REVIEWER COMMENTS IF THERE ARE CONFLICTING NOTES, ADDENDUMS TAKE PRECEDENCE OVER STANDARD TEMPLATE NOTES**

ADDENDUM #15 - ONCOR: DISTANCE BETWEEN VLLD/AC DISCONNECT WILL BE WITHIN 10' OF THE ONCOR METER AND BE ON AN ACCESSIBLE EXTERIOR. IF THE VLLD IS NOT LOCATED WITHIN 10' OF THE ONCOR METER, CLASS 2 OR 3 PLACARDS ARE TO BE USED
ADDENDUM #32 - 1: CALCULATION FOR OCPD TO THE AC OUTPUT INVERTER @125%: 16A(INVERTER MAXIMUM OUTPUT CURRENT) x 1.25 =20A
ADDENDUM #32 - 2: CALCULATIONS FO RTHE SUM OF THE MAIN OCPD AND THE INVERTER @120%: 50A OF ALLOWABLE BACKFEED FOR LOADSIDE CONNECTIONS
ADDENDUM #32 - 3: CALCULATIONS FOR THE DERATING OF CONDUCTORS IN RACEWAY FOR ROOFTOP PV SYSTEMS: SEE EE-3 PAGE

INSTALLATION NOTES:

PREFORM TAP USING POLARIS AWG INSULATED TAP CONNECTERS ON THE LINE SIDE OF THE SERVICE WIRES


Fluent SOLAR
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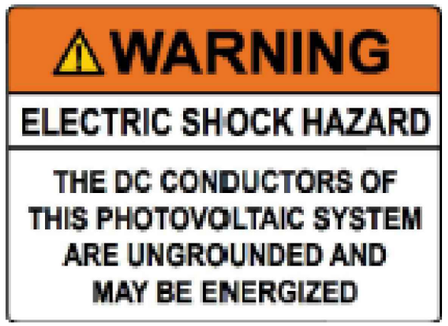
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

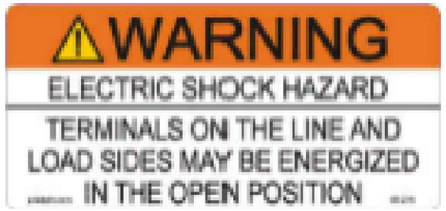
DESIGNED BY: DA
DESIGNED ON
1/14/2022

3-LINE DIAGRAM

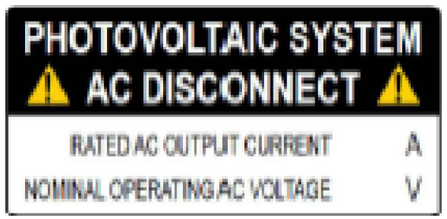
E-1




LABEL 1
AT EACH JUNCTION BOX, COMBINER BOX, DISCONNECT, AND DEVICE WHERE ENERGIZED UNGROUNDED CONDUCTORS MAY BE EXPOSED DURING SERVICE. NEC. 690.35(F)




LABEL 2
FOR PV DISCONNECTING MEANS WHERE ALL TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION.
NEC 690.17(E), NEC 705.22




LABEL 3
AT POINT OF INTERCONNECTION, MARKED AT AC DISCONNECTING MEANS.
NEC 690.54, NEC 690.13 (B)

*FOR VALUES SEE ELECTRICAL CALCS PAGE, VALUES TO BE PRINTED AND NOT HAND WRITTEN*



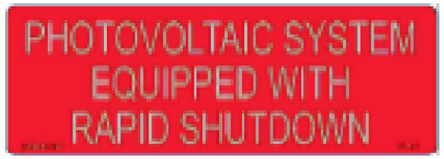

LABEL 4
AT POINT OF INTERCONNECTION FOR EQUIPMENT CONTAINING OVERCURRENT DEVICES IN CIRCUTS SUPPLYING POWER TO A BUSBAR OR CONDUCTOR SUPPLIED FORM MULTIPLE SOURCES, EACH
SERVICE EQUIPMENT AND ALL ELECTRIC POWER PRODUCTION SOURCE LOCATIONS.
NEC 705.12(D)(3)




LABEL 5
AT DIRECT-CURRENT EXPOSED RACEWAYS, CABLE TRAYS, COVERS AND ENCLOSURES OF JUNCTION BOXES, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS.
NEC 690.31(G)(3&4)



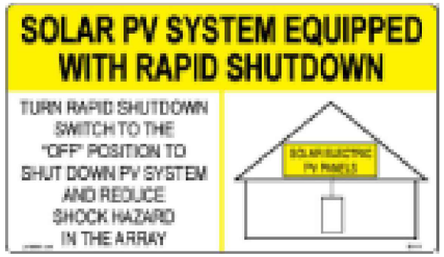

LABEL 6
PLACED ADJACENT TO THE BACK-FED BREAKER FROM THE INVERTER IF TIE IN CONSISTS OF LOAD SIDE CONNECTION TO BUSBAR.
NEC 705.12(D)(2)(3)(B)



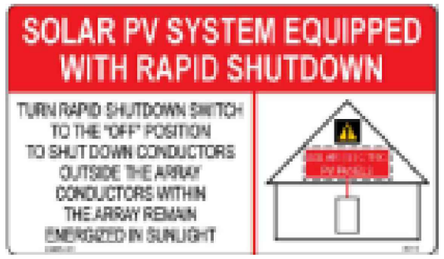

LABEL 7
SIGN LOCATED AT UTILITY SERVICE EQUIPMENT.
NEC 690.56(C)




LABEL 8
(ONLY IF 3 OR MORE SUPPLY SOURCES TO A BUSBAR)
SIGN LOCATED AT LOAD CENTER IF CONTAINS 3 OR MORE POWER SOURCES. NEC 705.12(D)(2)(3)(C)




LABEL 9
FOR PV SYSTEMS THAT SHUT DOWN THE ARRAY AND CONDUCTORS LEAVING THE ARRAY: SIGN TO BE LOCATED ON OR NO MORE THAN 3 FT AWAY FROM SERVICE DISCONNECTING MEANS TO WHICH THE PV SYSTEMS ARE CONNECTED AND SHALL INDICATE THE LOCATION OF ALL IDENTIFIED RAPID SHUTDOWN SWITCHES IF NOT AT THE SAME LOCATION.
[NEC 690.56(C)(1)(A)]




LABEL 10
FOR PV SYSTEMS THAT ONLY SHUT DOWN CONDUCTORS LEAVING THE ARRAY: SIGN TO BE LOCATED ON OR NO MORE THAN 3 FT AWAY FROM SERVICE DISCONNECTING MEANS TO WHICH THE PV SYSTEMS ARE CONNECTED AND SHALL INDICATE THE LOCATION OF ALL IDENTIFIED RAPID SHUTDOWN SWITCHES IF NOT AT THE SAME LOCATION.
[NEC 690.56(C)(1)(B)]




LABEL 11
A PERMANENT LABEL FOR THE DC PV POWER SOURCE INDICATING THE INFORMATION SPECIFIED IN (1) THROUGH (3) SHALL BE PROVIDED BY INSTALLER AT DC PV SYSTEM DISCONNECTING MEANS AND AT EACH DC EQUIPMENT DISCONNECTING MEANS REQUIRED BY 690.15. WHERE A DISCONNECTING MEANS HAS MORE THAN ONE DC PV POWER SOURCE, THE VALUES IN 690.53(1) THROUGH (3) SHALL BE SPECIFIED FOR EACH SOURCE.

*FOR VALUES SEE ELECTRICAL CALCS PAGE, VALUES TO BE PRINTED AND NOT HAND WRITTEN*




LABEL 12
A RAPID SHUTDOWN SWITCH SHALL HAVE A LABEL LOCATED ON OR NO MORE THAN 1M (3FT) FROM THE SWITCH THAT INCLUDES THE FOLLOWING WORDING "RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM" THE LABEL SHALL BE REFLECTIVE WITH ALL LETTERS CAPITALIZED AND HAVING A MINIMUM HEIGHT OF 9.5MM (3/8 IN.), IN WHITE ON RED BACKGROUND)

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

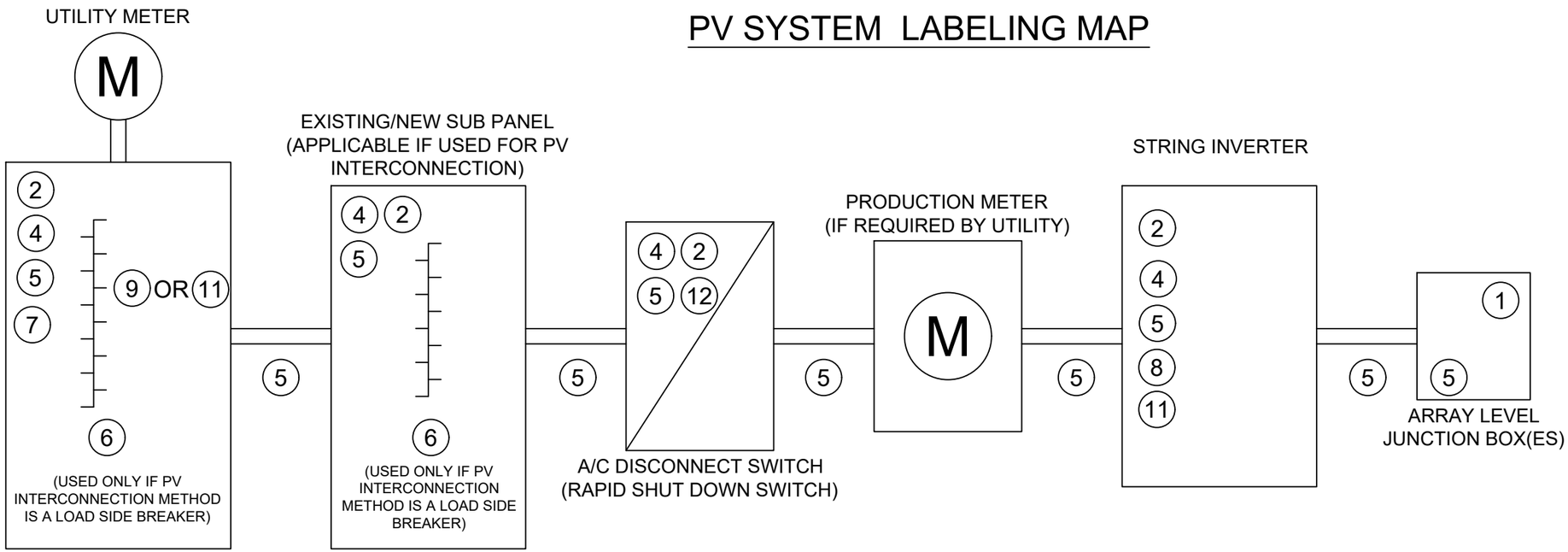
| | |
|---|---|
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |
| SYSTEM SIZE: | 5.11 KW (E-1) |
| | ( 14 ) URE - F6M365E7G-BB (CS-1) |
| | ( 1 ) SOLAREDGE - SE3800H-US (CS-2) |
| | ( 14 ) SOLAREDGE - P401 (CS-3) |
| | ROOF TYPE: COMP SHINGLE (PV-2) |
| | RAFTERS, 2X4 @ 24" (PV-2) |
| | INTERCONNECTION METHOD: RATED BACK FED TAP |

DESIGNED BY: DA
DESIGNED ON
1/14/2022

LABELS

E-2

# PV SYSTEM LABELING MAP




* DIRECTORY PLACARD REQUIRED BY NEC 705.10, TO BE PLACED ON THE MAIN SERVICE PANEL COVER (SHOWN AS LABEL "DP"). SEE DIRECTORY PLACARD ATTACHED TO PLANSET FOR REFERENCE.

LABELING NOTES:

1. LABELS CALLED OUT ACCORDING TO ALL COMMON CONFIGURATIONS IN ADOPTED NATIONAL ELECTRIC CODE (SEE C-1). ELECTRICIAN TO DETERMINE EXACT REQUIREMENTS IN THE FIELD PER DESIGN CONFIGURATION, CURRENT, NEC, AND LOCAL CODES.

2. LABELING REQUIREMENTS BASED ON THE ADOPTED NATIONAL ELECTRIC CODE (SEE C-1), OSHA STANDARD 19010.145, ANSI Z535.

3. MATERIAL BASED ON THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.

4. LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED [NEC 110.21] THEY SHALL BE PERMANENTLY ATTACHED, WEATHER/SUNLIGHT RESISTANT, AND WILL NOT BE HAND WRITTEN NEC 11.21(B)

5. LABELS TO BE A MINIMUM LETTER HEIGHT OF 3/8", WHITE ON RED BACKGROUND; REFLECTIVE, AND PERMANENTLY AFFIXED [IFC 605.11.1.1]

6. FOR LOCATION OF LABEL SEE CODE REFERENCED NEXT TO LABEL FOR.

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

| | |
|---|---|
| SYSTEM SIZE: 5.11 KW (E-1) | |
| ( 14 ) URE - F6M365E7G-BB (CS-1) | |
| ( 1 ) SOLAREDGE - SE3800H-US (CS-2) | |
| ( 14 ) SOLAREDGE - P401 (CS-3) | |
| ROOF TYPE: COMP SHINGLE (PV-2) | |
| RAFTERS, 2X4 @ 24" (PV-2) | |
| INTERCONNECTION METHOD: RATED BACK FED TAP | |
| CUSTOMER LAST NAME: STEWART | |
| ADDRESS: 13519 CORBY RD | |
| CITY: CLEVELAND | |
| STATE: OH | |
| ZIP: 44120 | |
| JURISDICTION: Cleveland | |
| UTILITY COMPANY: FIRST ENERGY | |

DESIGNED BY: DA

DESIGNED ON

1/14/2022

LABELS

E-2.1

## SYSTEM SIZE

| | |
|---|---|
| AC SYSTEM SIZE: | 3.8 KW |
| DC SYSTEM SIZE: | 5.11 KW |

## LABEL VALUES

| | |
|---|---|
| AC OPERATING CURRENT = | 16A |
| AC OPERATING VOLTAGE = | 240V |
| MAX CIRCUIT CURRENT AMPS = | 17.5A |
| DC MAXIMUM VOLTAGE = | 60V |

## INTERCONNECTION CALCULATIONS

| ITEM | UNIT | PANEL |
|---|---|---|
| BUS RATING | AMPS | 125A |
| MAIN OCPD | AMPS | 100A |
| ALLOWED PV PER NEC | AMPS | 150A |

## CONDUCTOR CALCULATIONS

| TAG A ELECTRICAL CALCS (SEE E-1) |
|---|
| UNDER MODULES, NOT IN CONDUIT |
| #10 AWG MAX CURRENT= 40A |
| 40A * .96= 38.4A |
| |
| SOLAREDGE SE3800H-US MAX CIRCUIT CURRENT |
| 21.29A FOR STRING 1 |
| |
| |
| |
| |
| |

| TAG B ELECTRICAL CALCS (SEE E-1) |
|---|
| #10 AWG MAX CURRENT = 40A |
| 40A * .96 = 38.4A (ASHRAE 2% AVERAGE HIGH =32° C) |
| |
| 38.4A PER CONDUCTOR |
| SOLAREDGE SE3800H-US MAX CIRCUIT CURRENT |
| 21.29A FOR STRING 1 |
| |
| |
| |
| |
| |

| TAG C ELECTRICAL CALCS (SEE E-1) |
|---|
| #10 AWG MAX CURRENT = 40A |
| 40A * .96 = 38.4A (ASHRAE 2% AVERAGE HIGH =32° C) |
| |
| 38.4A PER CONDUCTOR |
| SOLAREDGE SE3800H-US MAX CIRCUIT CURRENT |
| 21.29A FOR STRING 1 |
| |
| |
| |
| |
| |

| CONDUCTOR NOTES | J-BOX NOTE |
|---|---|
| TAG A= SOLAREDGE MC CABLE WILL RUN THROUGH ATTIC WHERE POSSIBLE | MULTIPLE J-BOXES MAY BE USED AND WILL BE DETERMINED AT INSTALL ONLY ONE SHOWN FOR CLARITY OF DESIGN |

| TAG D (IF APPLICABLE) ELECTRICAL CALCS (SEE E-1) |
|---|
| #6 AWG MAX CURRENT = 75A |
| 75A * .96 = 72A (ASHRAE 2% AVERAGE HIGH =32° C) |
| |
| 72A PER CONDUCTOR |
| SOLAREDGE SE3800H-US MAX OUTPUT =16A |
| 16A * 1.25 (SAFETY FACTOR) = 20A |
| SOLAREDGE RECCOMENDED OCPD= 20A |

| DESIGN CRITERIA AND CALCULATIONS BASED UPON: |
|---|
| NEC TABLE CEC/NEC 310.15(B)(16) 90° C (194° F) |
| ASHRAE 2% AVERAGE HIGH =32° C |
| NEC TABLE 310.15(B)(2)(a) 90° C DERATE FACTOR = .96 |

## EQUIPMENT INFO

### MODULE

| | | |
|---|---|---|
| MANUFACTURER | URE | |
| MODEL | F6M365E7G-BB | |
| PMAX | 365 | W |
| VOC | 40.7 | V |
| VMP | 39.5 | V |
| IMP | 9.13 | A |
| ISC | 11.43 | A |
| TEMPERATURE COEFFICENT OF PMAX | -0.35 | %/°C |
| TEMPERATURE COEFFICENT OF VOC | -0.27 | %/°C |

### INVERTER / MICRO-INVERTER

| | |
|---|---|
| # OF INVERTERS | 1 |
| MANUFACTURER | SOLAREDGE |
| MODEL | SE3800H-US |
| MAX AC OUTPUT | 16A |
| AC OUTPUT VOLTAGE | 240V |
| MAX DC INPUT VOLTAGE | 240V |
| NOMINAL DC INPUT VOLTAGE | 380V |
| MAX INPUT CURRENT | 10.5A |
| MAX OUTPUT CURRENT | 16A |
| WEIGHTED CEC EFFICIENCY | 99% |
| MIN AC CONDUCTOR SIZE | #10 AWG |
| MIN AC GROUND SIZE | #10 AWG |
| PV BREAKER | 20A |
| INVERTER WATTAGE | 3800W |

### OPTIMIZER / COMBINER PANEL

| | | |
|---|---|---|
| MANUFACTURER | SOLAREDGE | |
| MODEL | P401 | |
| MAX. INPUT POWER | 400 | W |
| MAX. VOC | 60 | V |
| OUTPUT CURRENT | 15 | A |
| OUTPUT VOLTAGE | 60 | V |
| MIN. STRING LENGTH | 8 | |
| MAX. STRING LENGTH | 15 | |
| MAX. STRING POWER | 16 | |

### BATTERY INFO (IF APPLICABLE)

| BATTERY INFO | |
|---|---|
| MANUFACTURER | |
| PART NUMBER | NO BATTERY |
| TOTAL ENERGY (kWh) | |
| USABLE ENERGY (kWh) | |
| CAPACITY (Ah) | |
| NOMINAL VOLTAGE (V) | |
| VOLTAGE RANGE (V) | |
| MAX POWER (kW) | |
| WEIGHT | |

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

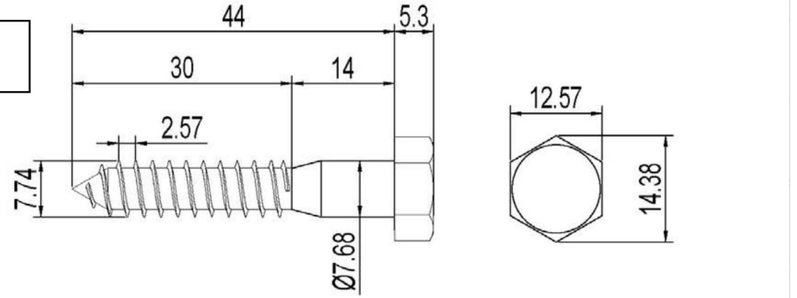
CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

ELECTRICAL CALCS AND EQUIPMENT INFO

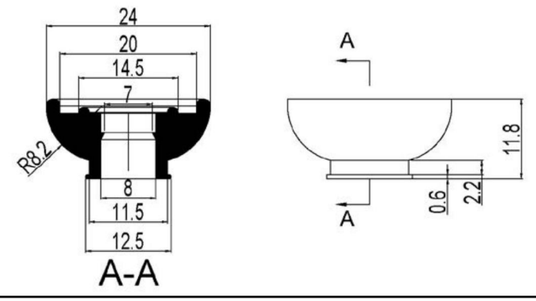
E-3

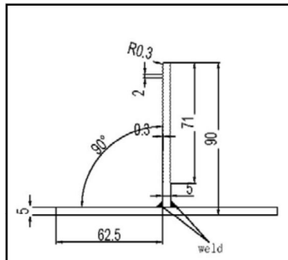
PN# 16318
Screws

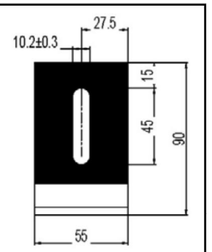


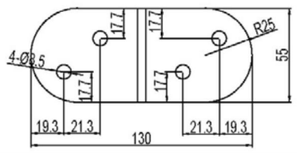

| Tolerance Range | | | | | | |
|---|---|---|---|---|---|---|
| Baiting tolerance | ±2 mm | QuickBOLT | | | | |
| Hole tolerance | ±0.3 mm | | | | | |
| Hole distance tolerance | ±0.5 mm | Design | | | Scale | Quantity |
| Form tolerance | ±2 mm | Drawing | | | Material | SUS304 |
| Thicknessness tolerance | ±0.1 mm | Confirm | | | Drawing No. | |
| Angle tolerance | ±1° mm | Verify | | | Finish | |

PN# 16318
Umbrella Washer



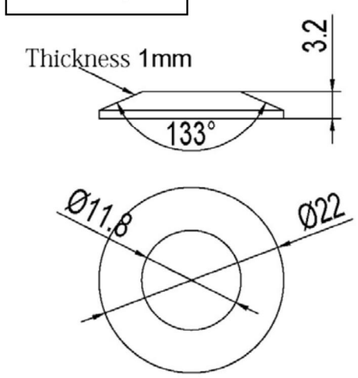




PN# 16318
Black T-Foot

PN# 16318
Silicone backing






# INSTALL INSTRUCTIONS



















## BLACK DECK MOUNT (16318)

## RECOMMENDED MATERIALS

- MFG approved sealant
- 1/2" Nut Setter

## INSTALLATION INSTRUCTIONS

1. Install anywhere on roof. No need to locate rafters
2. Place sealant around the bottom of the T-Foot
3. Place the T-Foot onto the roof
4. Insert first 5/16" x 1-3/4" Hex Lags into T-Foot
5. Drive the screw until the Umbrella Washer is compressed
6. Repeat with remaining screws

* Do not predrill

* To Drive Screws and Set Umbrella Washers Properly Torque PSI should not Exceed 57 Lbs/Inch






Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253


SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

MOUNT

M-1

# UL CERTIFICATION

## CERTIFICATE OF COMPLIANCE

**Certificate Number** 20191115-E493748
**Report Reference** E493748-20170817
**Issue Date** 2019-NOVEMBER-15

**Issued to:** QUICKBOLT A DIVISION OF QUICKSCREWS INTERNATIONAL CORP
5830 Las Positas Rd
Livermore, CA 94551

**This is to certify that representative samples of** COMPONENT - MOUNTING SYSTEMS, MOUNTING DEVICES, CLAMPING DEVICES AND GROUND LUGS FOR USE WITH PHOTOVOLTAIC MODULES AND PANELS
(See Adendum for Additional Information.)

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

**Standard(s) for Safety:** UL 2703 Standard for Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels.

**Additional Information:** See the UL Online Certifications Directory at www.ul.com/database for additional information

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

Page 1 of 2



5830 Las Positas Road, Livermore CA 94551 | 3948 Airway Drive, Rock Hill SC 29732
Phone: (844) 671-6045 | Fax: (800) 689-7975 | www.quickbolt.com
QuickBOLT is a division of Quickscrews International Corp.

## CERTIFICATE OF COMPLIANCE

**Certificate Number** 20191115-E493748
**Report Reference** E493748-20170817
**Issue Date** 2019-NOVEMBER-15

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

**Addendum -**

**Models/Product**

USR – Component, Roof Mounting Hook Units, Models 15891 15893 15987 16000 16317 16318 16988 16990 16991 16993 17508 17509 17510 17511 17512 17513 17514 17515 17516 17517 17518 17519 17520 17521 17522 17523 17524 17525 17526 17527 17536 17537 17538 17539 17540 17541 17542 17543 17544 17545 17546 17547 17548 17549 17550 17551 17552 17553 17554 17555 17556 17558 17559 17560 17568 17569 17570 17571 17572 17573 17574 17575 17576 17577 17578 17579 17580 17585 17586 17587 17588 17589 17592 17596 17600 17601 17606 17607 17608 17609 17610 17611 17612 17613 17614 17615 17616 17617 17618 17620 17621 17622 17623 17624 17625 17626 17627 17628 17629 17630 17631 17632 17633 17636 17637 17638 17639 17642 17643 17646 17647 17648 17649 17650 17651 17659 17664 17667 17669 17670 17671 17672 17673 17678 17679 17680 17681 17686 17687 17688 17689 17700 17701 17702 17703 17704 17705 17706 17707 17708 17709 17710 17711 17712 17717 17718 17759 15891-10 15891BLK-10 15987A 15987B 17667SS 17672SS 17680SS 17688SS 17713SS 17720 17721SS 17723 17724SS 17726 17727SS 17729 17730SS 15894SS 15891SS 15987BSS 17660 17661 17662 17663

Ratings: Overcurrent Protection Rating – 25 Amps

Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

Page 2 of 2



5830 Las Positas Road, Livermore CA 94551 | 3948 Airway Drive, Rock Hill SC 29732
Phone: (844) 671-6045 | Fax: (800) 689-7975 | www.quickbolt.com
QuickBOLT is a division of Quickscrews International Corp.

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE – F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE – SE3800H-US (CS-2)
( 14 ) SOLAREDGE – P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

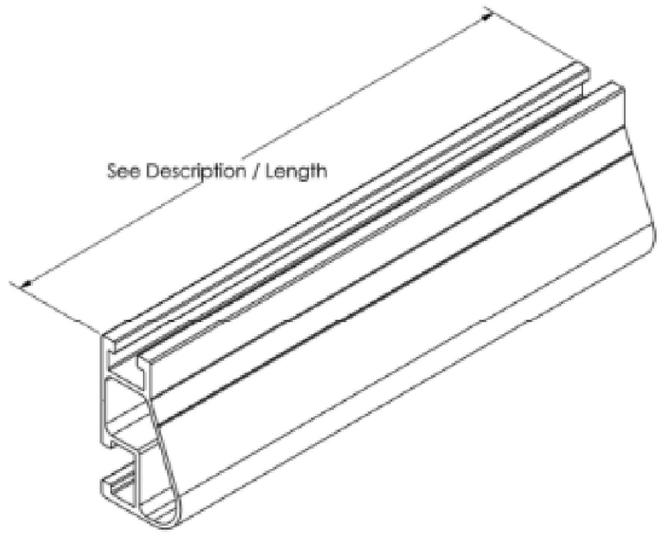
MOUNT CONT.

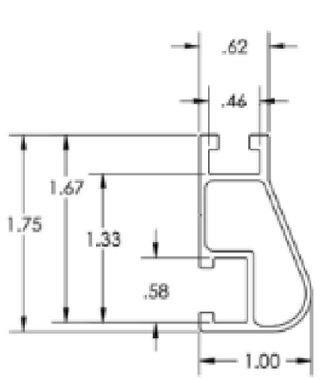
M-2

Cut Sheet

IRONRIDGE

# XR10 Rail




| Rail Section Properties | |
|---|---|
| Property | Value |
| Total Cross-Sectional Area | 0.363 $in^2$ |
| Section Modulus (X-axis) | 0.136 $in^3$ |
| Moment of Inertia (X-axis) | 0.124 $in^4$ |
| Moment of Inertia (Y-axis) | 0.032 $in^4$ |
| Torsional Constant | 0.076 $in^3$ |
| Polar Moment of Inertia | 0.033 $in^4$ |

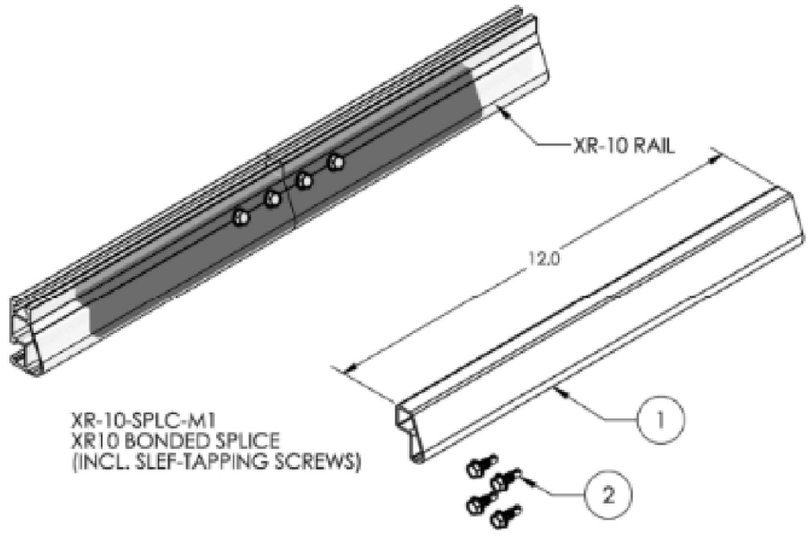
| Clear Part Number | Black Part Number | Description / Length | Material | Weight |
|---|---|---|---|---|
| XR-10-132A | XR-10-132B | XR10, Rail 132" (11 Feet) | 6000-Series Aluminum | 4.67 lbs. |
| XR-10-168A | XR-10-168B | XR10, Rail 168" (14 Feet) | | 5.95 lbs. |
| XR-10-204A | XR-10-204B | XR10, Rail 204" (17 Feet) | | 7.22 lbs. |

v1.0

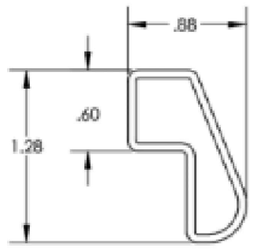
Cut Sheet

IRONRIDGE

# XR10 Bonded Splice

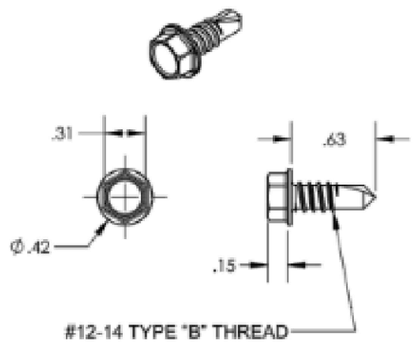



**1) Splice, XR10, Mill 12" long**




| Property | Value |
|---|---|
| Material | 6000 Series Aluminum |
| Finish | Mill |

**2) Screw, Self Drilling**




| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

v1.10

Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

| | |
|---|---|
| SYSTEM SIZE: | 5.11 KW (E-1) |
| | ( 14 ) URE - F6M365E7G-BB (CS-1) |
| | ( 1 ) SOLAREDGE - SE3800H-US (CS-2) |
| | ( 14 ) SOLAREDGE - P401 (CS-3) |
| | ROOF TYPE: COMP SHINGLE (PV-2) |
| | RAFTERS, 2X4 @ 24" (PV-2) |
| | INTERCONNECTION METHOD: RATED BACK FED TAP |
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA

DESIGNED ON

1/14/2022

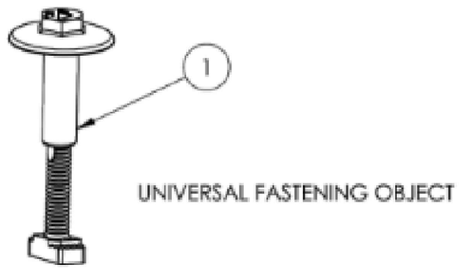
EQUIPMENT

EQ-1

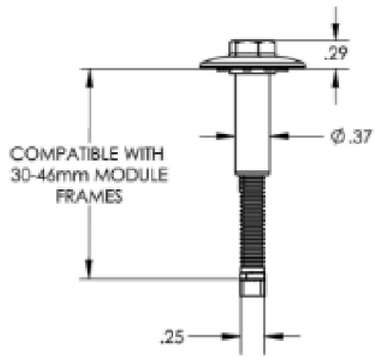
Cut Sheet

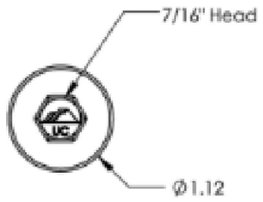
IRONRIDGE

# Universal Fastening Object




| ITEM NO. | DESCRIPTION | QTY. IN KIT |
|---|---|---|
| UFO-CL-001 | KIT, 4PCS, UNIVERSAL MODULE CLAMP, CLEAR | 4 |
| UFO-CL-001-B | KIT, 4PCS, UNIVERSAL MODULE CLAMP, BLACK | 4 |



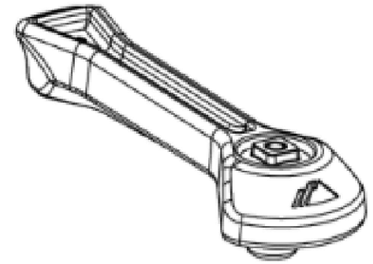

| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear and Black |

v1.20

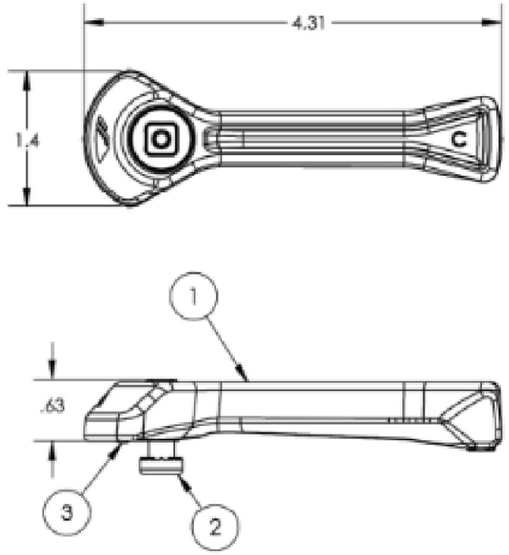
Cut Sheet

IRONRIDGE

# CAMO



| PART NO. | DESCRIPTION |
|---|---|
| CAMO-01-M1 | HIDDEN END CAM (UNIVERSAL CLAMP) |




| Item No. | Description | Material | Finish |
|---|---|---|---|
| 1 | Handle | Aluminum | Mill |
| 2 | Bolt, Bonding Shoulder | 300 Series Stainless Steel | Clear |
| 3 | Bonding Pins, Linear | 300 Series Stainless Steel | Clear |

v1.0

Fluent SOLAR
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SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

EQUIPMENT

EQ-2

1495 Zephyr Avenue
Hayward, CA 94544
1-800-227-9523
IronRidge.com

**Attn:** Corey Geiger, COO, IronRidge Inc.
**Date:** September 7th, 2018

**Re:** Structural Certification and Span Tables for IronRidge Flush Mount System

This letter addresses the structural performance and code compliance of IronRidge's Flush Mount System. The Flush Mount System is a proprietary rooftop mounting system used to support photovoltaic (PV) modules installed in portrait or landscape orientation and set parallel to the underlying roof surface. PV modules are supported by extruded aluminum XR Rails and secured to the rails with IronRidge mounting clamps. The XR Rails are side mounted to a selected roof attachment with 3/8" stainless steel bonding hardware and then attached directly to the roof structure or to a stanchion that is fastened to the underlying roof structure. Assembly details of a typical Flush Mount installation and its core components are shown in Exhibit EX-0015.

The IronRidge Flush Mount System is designed and certified to the structural requirements of the reference standards listed below, for the load conditions and configurations tabulated in the attached span tables.

- ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures (ASCE 7-10)
- 2015 International Building Code (IBC-2015)
- 2016 California Building Code (CBC-2016)
- 2015 Aluminum Design Manual (ADM-2015)

The tables included in this letter provide the maximum allowable spans of XR Rails in the Flush Mount System for the respective loads and configurations listed, covering wind exposure categories B, C, & D, roof zones 1, 2 & 3, and roof slopes from 0° to 45°. The span tables are applicable provided that the following conditions are met:

1. *Span* is the distance between two adjacent roof attachment points (measured at the center of the attachment fastener)
2. The underlying roof pitch, measured between roof surface and horizontal plane, is 45° or less.
3. The *mean roof height*, defined as the average of the roof eave height and the roof ridge height measured from grade, does not exceed 30 feet.
4. Module length shall not exceed the listed maximum dimension provided for the respective span table and module width shall not exceed 48".
5. All Flush Mount components shall be installed in a professional workmanlike manner per IronRidge's *Flush Mount installation manual* and other applicable standards for general roof construction practice.

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Hayward, CA 94544
1-800-227-9523
IronRidge.com

The parameters and adjustments allowed in the span tables are defined as the following:

1. The Flush Mount System is designed as a Risk Category II structure as defined by ASCE 7-10 Chart 1.5-1.
2. When designing with a roof slope not listed in the span tables, but no greater than 45°, the lesser of the two span values listed immediately below and above the desired slope shall be used. For instance, if one is designing to a roof slope of 12°, use the lesser of the two span values associated with 10° and 15°.
3. The wind speed selection shall conform to ASCE 7-10 Fig. 26.5-1A (Risk Category II wind) and any state & local county/city amendments to the IBC. No special wind topographic features are included in the span tables and the topographic coefficient (Kzt) is taken as 1.0.
4. The snow load used in the span tables is the *ground snow* and shall conform to ASCE 7-10 Fig. 7-1. If a more restrictive snow load is imposed by a local building code/amendment to the IBC, such snow load requirement shall also be complied with. If the local jurisdiction specified snow load is in the format of a flat roof snow load, it shall first be converted to a ground snow following the local building code/amendment before the application of the attached span tables. No special snow conditions are considered including unbalanced, drifting, sliding or ponding snow. Snow load conditions presented in the span tables do not include buildings which are intentionally kept below freezing, kept just above freezing, or unheated.
5. The span tables reflect the ASCE 7 prescribed earthquake loads with the maximum magnitudes being:
    1) For ground snow no greater than 42psf: $S_s \leq 2.0g$ for Site Class A, B, C, or D.
    2) For ground snow greater than 65psf: $S_s \leq 1.0g$ for Site Class A, B, C, or D.
    3) For ground snow between 42 and 65psf: $S_s \leq 1.5g$ for Site Class A, B, C, or D.
6. Roof zone size and definition conforms to ASCE 7-10 Fig. 30.4-2A.
7. Allowable span length in the charts may be multiplied by a factor of 1.08 if the rails are continuous over a minimum of three spans.
8. An array to roof clearance of 2" minimum must be provided.
9. The maximum cantilever length measured from the rail end to the nearest attachment point shall not exceed 40% of the *allowable span* provided for the respective load & configuration condition from the span tables.
10. No rail splices are allowed in the cantilever, outer 2/3 of end spans, or middle 1/3 of interior spans.
11. For shaded cells of the span tables, UFO Mid Clamps shall not be installed closer than 20" to the shaded cell's associated Roof Zone.
12. When a roof attachment listed in IronRidge's Flush Mount *installation manual* is considered, the span values provided in this letter can be adjusted using IronRidge's online Design Assistant by checking the capacity of the selected roof attachment against the reaction forces provided in Design Assistant.

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13. Systems using CAMO module clamps shall be installed with the following guidance:
    1) For single module installations ("orphan modules") using modules with a length greater than 67.5", CAMO clamps shall not be installed in regions that experience ground snow loads of 70psf and greater; such scenarios are shown by asterisks in the applicable span table.
    2) CAMO will function within a module's design load ratings. Be sure the specific module being used with CAMO is listed in IronRidge's installation manual, is suitable for the environmental conditions of a particular project, and meets the dimensional requirements shown in the figure below.

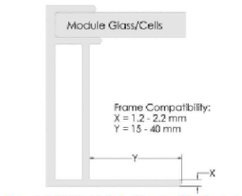


*Figure 1: CAMO Module Frame Dimensional Requirements*

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Hayward, CA 94544
1-800-227-9523
IronRidge.com

The span tables provided in this letter are certified based on the structural performance of IronRidge XR Rails only with no consideration of the structural adequacy of the chosen roof attachments, PV modules, or the underlying roof supporting members. It is the responsibility of the installer or system designer to verify the structural capacity and adequacy of the aforementioned system components in regards to the applied or resultant loads of any chosen array configuration.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
GANG XUAN
NO. 6504
STRUCTURAL
STATE OF CALIFORNIA

Date: 2018.09.18 10:17:09 -07'00'

Gang Xuan, SE
Senior Structural Engineer

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Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

EQUIPMENT

EQ-3

| Rail: XR10 | | Flush Mount System Span Table (inches)<br>Portrait Installation (Maximum Module Length 67.5")<br>Exposure C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wind Speed (mph) | Roof Slope (degs.) | Ground Snow: 0 psf | | | 10 psf | | | 20 psf | | | 30 psf | | | 40 psf | | | 50 psf | | | 60 psf | | | 70 psf | | | 80 psf | | | 90 psf | | |
| | | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 | Zone 1 | Zone 2 | Zone 3 |
| 110 | 0-7 | 83 | 72 | 55 | 81 | 72 | 55 | 68 | 68 | 55 | 67 | 67 | 55 | 60 | 60 | 55 | 54 | 54 | 54 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 8-27 | 85 | 72 | 56 | 80 | 72 | 56 | 67 | 67 | 56 | 66 | 66 | 56 | 60 | 60 | 56 | 54 | 54 | 54 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 28-45 | 81 | 79 | 79 | 76 | 76 | 76 | 66 | 66 | 66 | 65 | 65 | 65 | 61 | 61 | 61 | 57 | 57 | 57 | 53 | 53 | 53 | 50 | 50 | 50 | 47 | 47 | 47 | 45 | 45 | 45 |
| 115 | 0-7 | 84 | 66 | 53 | 81 | 66 | 53 | 68 | 66 | 53 | 67 | 66 | 53 | 60 | 60 | 53 | 54 | 54 | 53 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 8-27 | 84 | 66 | 54 | 80 | 66 | 54 | 67 | 66 | 54 | 66 | 66 | 54 | 60 | 60 | 54 | 54 | 54 | 53 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 28-45 | 79 | 76 | 76 | 74 | 74 | 74 | 65 | 65 | 65 | 64 | 64 | 64 | 60 | 60 | 60 | 56 | 56 | 56 | 53 | 53 | 53 | 50 | 50 | 50 | 47 | 47 | 47 | 45 | 45 | 45 |
| 120 | 0-7 | 81 | 64 | 50 | 81 | 64 | 50 | 68 | 64 | 50 | 67 | 64 | 50 | 60 | 60 | 50 | 54 | 54 | 50 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 8-27 | 84 | 64 | 51 | 80 | 64 | 51 | 67 | 64 | 51 | 66 | 64 | 51 | 60 | 60 | 51 | 54 | 54 | 51 | 50 | 50 | 50 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 28-45 | 76 | 73 | 73 | 73 | 73 | 73 | 64 | 64 | 64 | 64 | 64 | 64 | 59 | 59 | 59 | 55 | 55 | 55 | 52 | 52 | 52 | 50 | 50 | 50 | 47 | 47 | 47 | 45 | 45 | 45 |
| 130 | 0-7 | 77 | 58 | 46 | 77 | 58 | 46 | 68 | 58 | 46 | 67 | 58 | 46 | 60 | 58 | 46 | 54 | 54 | 46 | 50 | 50 | 46 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 8-27 | 80 | 59 | 47 | 79 | 59 | 47 | 66 | 59 | 47 | 65 | 59 | 47 | 60 | 58 | 47 | 54 | 54 | 47 | 50 | 50 | 47 | 46 | 46 | 46 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 28-45 | 72 | 68 | 68 | 72 | 68 | 68 | 64 | 64 | 64 | 61 | 61 | 61 | 57 | 57 | 57 | 54 | 54 | 54 | 51 | 51 | 51 | 49 | 49 | 49 | 47 | 47 | 47 | 45 | 45 | 45 |
| 140 | 0-7 | 73 | 54 | 43 | 73 | 54 | 43 | 68 | 54 | 43 | 67 | 54 | 43 | 60 | 54 | 43 | 54 | 54 | 43 | 50 | 50 | 43 | 46 | 46 | 43 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 8-27 | 74 | 54 | 44 | 74 | 54 | 44 | 65 | 54 | 44 | 64 | 54 | 44 | 59 | 54 | 44 | 54 | 54 | 44 | 50 | 50 | 44 | 46 | 46 | 44 | 43 | 43 | 43 | 41 | 41 | 41 |
| | 28-45 | 67 | 64 | 64 | 67 | 64 | 64 | 60 | 60 | 60 | 59 | 59 | 59 | 56 | 56 | 56 | 53 | 53 | 53 | 50 | 50 | 50 | 48 | 48 | 48 | 46 | 46 | 46 | 44 | 44 | 44 |
| 150 | 0-7 | 68 | 50 | 40 | 68 | 50 | 40 | 68 | 50 | 40 | 67 | 50 | 40 | 60 | 50 | 40 | 54 | 50 | 40 | 50 | 50 | 40 | 46 | 46 | 40 | 43 | 43 | 40 | 41 | 41 | 40 |
| | 8-27 | 72 | 51 | 41 | 72 | 51 | 41 | 64 | 51 | 41 | 64 | 51 | 41 | 57 | 51 | 41 | 53 | 51 | 41 | 50 | 50 | 41 | 46 | 46 | 41 | 43 | 43 | 41 | 41 | 41 | 41 |
| | 28-45 | 64 | 59 | 59 | 64 | 59 | 59 | 58 | 58 | 58 | 57 | 57 | 57 | 54 | 54 | 54 | 51 | 51 | 51 | 49 | 49 | 49 | 47 | 47 | 47 | 45 | 45 | 45 | 43 | 43 | 43 |
| 160 | 0-7 | 64 | 48 | 38 | 64 | 48 | 38 | 64 | 48 | 38 | 64 | 48 | 38 | 60 | 48 | 38 | 54 | 48 | 38 | 50 | 48 | 38 | 46 | 46 | 38 | 43 | 43 | 38 | 41 | 41 | 38 |
| | 8-27 | 65 | 48 | 39 | 65 | 48 | 39 | 64 | 48 | 39 | 61 | 48 | 39 | 56 | 48 | 39 | 53 | 48 | 39 | 49 | 48 | 39 | 46 | 46 | 39 | 43 | 43 | 39 | 41 | 41 | 39 |
| | 28-45 | 60 | 55 | 55 | 60 | 55 | 55 | 56 | 55 | 55 | 55 | 55 | 55 | 52 | 52 | 52 | 50 | 50 | 50 | 48 | 48 | 48 | 46 | 46 | 46 | 44 | 44 | 44 | 42 | 42 | 42 |
| 170 | 0-7 | 60 | 44 | 35 | 60 | 44 | 35 | 60 | 44 | 35 | 60 | 44 | 35 | 60 | 44 | 35 | 54 | 44 | 35 | 50 | 44 | 35 | 46 | 44 | 35 | 43 | 43 | 35 | 41 | 41 | 35 |
| | 8-27 | 61 | 45 | 36 | 61 | 45 | 36 | 61 | 45 | 36 | 60 | 45 | 36 | 55 | 45 | 36 | 52 | 45 | 36 | 49 | 45 | 36 | 46 | 45 | 36 | 43 | 43 | 36 | 41 | 41 | 36 |
| | 28-45 | 57 | 52 | 52 | 57 | 52 | 52 | 54 | 52 | 52 | 54 | 52 | 52 | 51 | 51 | 51 | 48 | 48 | 48 | 46 | 46 | 46 | 45 | 45 | 45 | 43 | 43 | 43 | 42 | 42 | 42 |
| 180 | 0-7 | 56 | 42 | 33 | 56 | 42 | 33 | 56 | 42 | 33 | 56 | 42 | 33 | 56 | 42 | 33 | 54 | 42 | 33 | 50 | 42 | 33 | 46 | 42 | 33 | 43 | 42 | 33 | 41 | 41 | 33 |
| | 8-27 | 58 | 42 | 34 | 58 | 42 | 34 | 58 | 42 | 34 | 58 | 42 | 34 | 54 | 42 | 34 | 51 | 42 | 34 | 48 | 42 | 34 | 46 | 42 | 34 | 43 | 42 | 34 | 41 | 41 | 34 |
| | 28-45 | 54 | 50 | 50 | 54 | 50 | 50 | 52 | 50 | 50 | 52 | 50 | 50 | 49 | 49 | 49 | 47 | 47 | 47 | 45 | 45 | 45 | 44 | 44 | 44 | 42 | 42 | 42 | 41 | 41 | 41 |

= min 72" span = min 64" span = min 48" span = Note: additional installation requirement on UFO middle clamps. Please refer to Note 10 on Page 2 for details.

REV 5/09/2018


Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253


SYSTEM SIZE: 5.11 KW (E-1)

( 14 ) URE - F6M365E7G-BB (CS-1)

( 1 ) SOLAREDGE - SE3800H-US (CS-2)

( 14 ) SOLAREDGE - P401 (CS-3)

ROOF TYPE: COMP SHINGLE (PV-2)

RAFTERS, 2X4 @ 24" (PV-2)

INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART

ADDRESS: 13519 CORBY RD

CITY: CLEVELAND

STATE: OH

ZIP: 44120

JURISDICTION: Cleveland

UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA

DESIGNED ON

1/14/2022

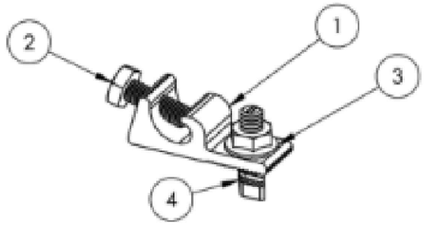
EQUIPMENT

EQ-4

Cut Sheet

IRONRIDGE

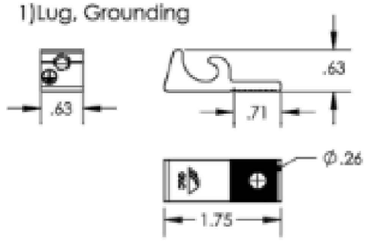
# Grounding Lug




| ITEM NO. | DESCRIPTION | QTY. IN KIT |
|---|---|---|
| 1 | LUG, GROUNDING, LAY-IN - LOW PROFILE | 2 |
| 2 | BOLT, 1/4-28 X .750' HEX CS SST | 2 |
| 3 | NUT, FLANGE HEX 1/4-20 SST | 2 |
| 4 | BOLT, T CSTM 1/4-20 X 1.188' LOCK SS | 2 |

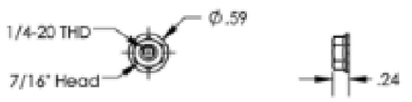
| Part Number | Description | Wire Size Range (AWG) |
|---|---|---|
| GD-LUG-003 | KIT, 2PCS, GROUNDING LUG, LOW PROFILE | 4-10 |

1)Lug, Grounding



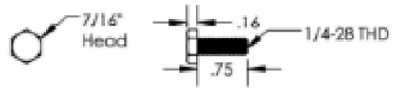

| Property | Value |
|---|---|
| Material | Tin Plated Copper |
| Finish | Clear Matte |

3) Nut, Flange Hex 1/4-20



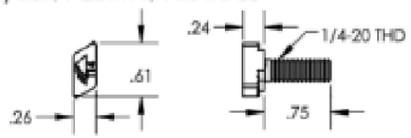

| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

2) Bolt, 1/4-28 x .750 Hex




| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

4) Bolt, T CSTM 1/4-20 x .750



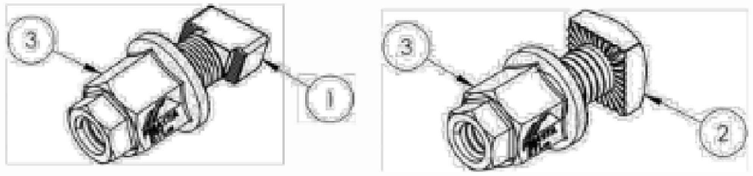

| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

v1.0

Cut Sheet

IRONRIDGE

# Bonding Hardware

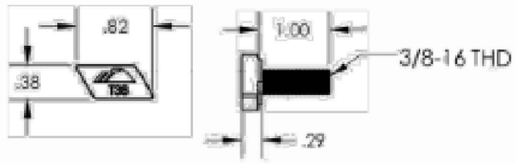



| ITEM NO. | DESCRIPTION |
|---|---|
| 1 | BOLT, T CSTM, 3/8-16 |
| 2 | BOLT, BONDING 3/8-16 SQ HEAD |
| 3 | NUT, BONDING STEP |

BONDING HARDWARE

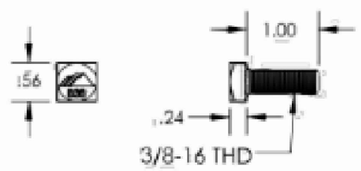
| Part Number | Description |
|---|---|
| BHW-TB-02-A1 | T-BOLT, BONDING HARDWARE |
| BHW-SQ-02-A1 | SQUARE-BOLT, BONDING HARDWARE |

1) BOLT, T CSTM, 3/8-16



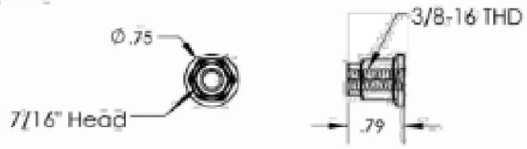

| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

2) BOLT, BONDING 3/8-16 SQ HEAD




| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

3) NUT, BONDING STEP




| Property | Value |
|---|---|
| Material | 300 Series Stainless Steel |
| Finish | Clear |

v1.30

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

EQUIPMENT

EQ-5

# UNITED RENEWABLE ENERGY



F6M_E7G-BB / 120 cells
345W - 365 W
Mono-Crystalline PV Module

URE modules use URE's state-of -the art cell cutting technology and advanced module manufacturing experience.

## Key Features

+ Publicly Traded Taiwanese Company. Formed as the merger of four Cell and Module Manufacturers in 2018. All four founding companies (Neo Solar Power, Gintech, Solartech, NDF) were in existence since 2008 or earlier.

+ Over 400MW Of Projects Installed in the United States.

+ 25 Year Output Warranty and 25 Year Product Guarantee

+ Winner of Taiwan Excellence Award 7 Consecutive Years for Highest Efficiency Module.

+ Super All Black Design for High Profile Residential and Commercial Installations.

+ High Quality Solar Cell Technology allows URE to be a major international exporter to Solar Module manufacturers in the United States and Europe.

UNITED RENEWABLE ENERGY

For more information, please visit us at ***www.urecorp.com***

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UNITED RENEWABLE ENERGY

## Electrical Data

| Model - STC | | F6M345E7G-BB | F6M350E7G-BB | F6M355E7G-BB | F6M360E7G-BB | F6M365E7G-BB |
|---|---|---|---|---|---|---|
| Maximum Rating Power (Pmax) | [W] | 345 | 350 | 355 | 360 | 365 |
| Module Efficiency | [%] | 18.68 | 18.95 | 19.22 | 19.50 | 19.77 |
| Open Circuit Voltage (Voc) | [V] | 39.90 | 40.10 | 40.30 | 40.50 | 40.70 |
| Maximum Power Voltage | [V] | 33.40 | 33.60 | 33.80 | 34.00 | 34.20 |
| Short Circuit Current (Isc) | [A] | 11.13 | 11.19 | 11.26 | 11.35 | 11.43 |
| Maximum Power Current | [A] | 10.33 | 10.42 | 10.51 | 10.59 | 10.68 |

*Standard Test Condi on (STC): Cell Temperature 25 °C, Irradiance 1000 W/m², AM 1.5
*Values without tolerance are typical numbers.Measurement tolerance: ± 3%

## Mechanical Data

| Item | Specification |
|---|---|
| Dimensions | 1762 mm (L)[1] x 1048 mm (W)[1] x 35 mm (D)[2] / 69.37"(L)[1] x 41.26"(W)[1] x 1.38"(D)[2] |
| Weight | 19.6 kg / 43.21 lbs |
| Solar Cell | Mono / 83 mm x 166mm |
| Front Glass | White toughened safety glass, 3.2mm thickness |
| Frame | Black anodized aluminum profile |
| Junction Box | IP ≥67, 3 diodes |
| Connectors Type | MC4 Compatible |
| Cable | 1.2M (cable length can be customized), 4mm² |
| Packaging Configuration | 31 pcs Per Pallet, 806 pcs per 40' HQ container |

[1] : With assembly tolerance of ± 2 mm [ ± 0.08" ]
[2] : With assembly tolerance of ± 0.8 mm [ ± 0.03" ]

## Operating Conditions

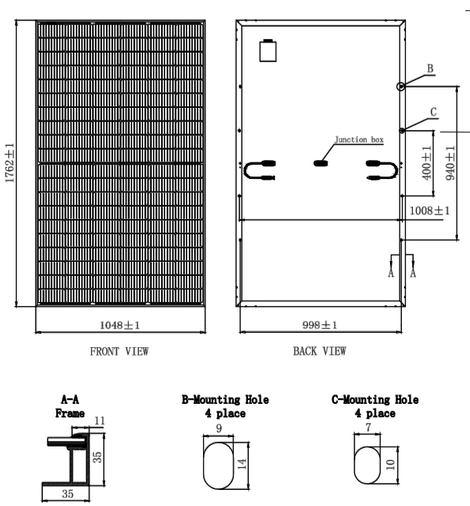
| Item | Specification |
|---|---|
| Mechanical Load | 5400 Pa |
| Maximum System Voltage | 1000 VDC |
| Series Fuse Rating | 20 A |
| Operating Temperature | -40 to 85 °C |

## Temperature Characteristics

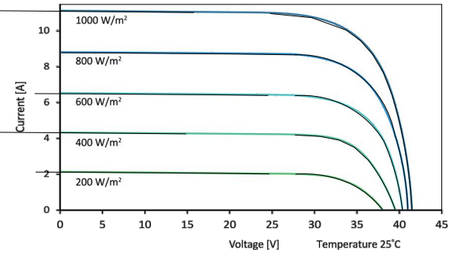
| Item | Specificatio |
|---|---|
| Nominal Module Operating Temperature | 45 °C ± 2°C |
| Temperature Coefficient of Isc | 0.048 % / °C |
| Temperature Coefficient of Voc | -0.27 % / °C |
| Temperature Coefficient of Pmax | -0.35 % / °C |

*Nominal module operating temperature (NMOT): Air mass AM 1.5, irradiance 800W/m², temperature 20°C, windspeed 1 m/s.
*Reduction in efficiency from 1000W/m² to 200W/m² at 25°C: 3.5 ± 2%.

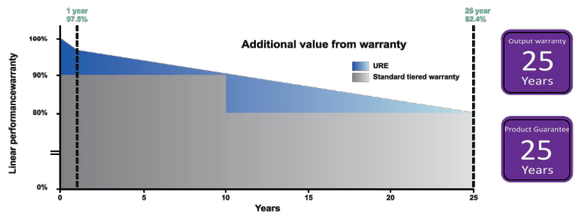
## Engineering Drawing (mm)




## Dependence on Irradiance




## Reliability with Warranty

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UNITED RENEWABLE ENERGY

For more information, please visit us at ***www.urecorp.com***

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Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

| | |
|---|---|
| SYSTEM SIZE: 5.11 KW (E-1) | |
| ( 14 ) URE - F6M365E7G-BB (CS-1) | |
| ( 1 ) SOLAREDGE - SE3800H-US (CS-2) | |
| ( 14 ) SOLAREDGE - P401 (CS-3) | |
| ROOF TYPE: COMP SHINGLE (PV-2) | |
| RAFTERS, 2X4 @ 24" (PV-2) | |
| INTERCONNECTION METHOD: RATED BACK FED TAP | |
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA
DESIGNED ON
1/14/2022

MODULE

CS-1

# Power Optimizer

## For North America

P320 / P340 / P370 / P400 / P401 / P405 / P485 / P505

POWER OPTIMIZER






## PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety

solaredge.com

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# Power Optimizer

## For North America

P320 / P340 / P370 / P400 / P401 / P405 / P485 / P505

| Optimizer model (typical module compatibility) | P320 (for 60-cell modules) | P340 (for high-power 60-cell modules) | P370 (for higher-power 60 and 72-cell modules) | P400 (for 72 & 96-cell modules) | P401 (for high power 60 and 72 cell modules) | P405 (for high-voltage modules) | P485 (for high-voltage modules) | P505 (for higher current modules) | |
|---|---|---|---|---|---|---|---|---|---|
| **INPUT** | | | | | | | | | |
| Rated Input DC Power[1] | 320 | 350 | 370 | 400 | 405 | | 485 | 505 | W |
| Absolute Maximum Input Voltage (Voc at lowest temperature) | 48 | | 60 | 80 | 60 | 125[2] | | 83[2] | Vdc |
| MPPT Operating Range | 8 - 48 | | 8 - 60 | 8 - 80 | 8-60 | 12.5 - 105 | | 12.5 - 83 | Vdc |
| Maximum Short Circuit Current (Isc) | 11 | 11.02 | 11 | 10.1 | 11.75 | 11 | | 14 | Adc |
| Maximum DC Input Current | 13.75 | | | 12.5 | 14.65 | 12.5 | | 17.5 | Adc |
| Maximum Efficiency | 99.5 | | | | | | | | % |
| Weighted Efficiency | 98.8 | | | | | | | 98.6 | % |
| Overvoltage Category | II | | | | | | | | |
| **OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)** | | | | | | | | | |
| Maximum Output Current | 15 | | | | | | | | Adc |
| Maximum Output Voltage | 60 | | | | | 85 | | | Vdc |
| **OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)** | | | | | | | | | |
| Safety Output Voltage per Power Optimizer | 1 ± 0.1 | | | | | | | | Vdc |
| **STANDARD COMPLIANCE** | | | | | | | | | |
| EMC | FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3 | | | | | | | | |
| Safety | IEC62109-1 (class II safety), UL1741 | | | | | | | | |
| Material | UL94 V-0, UV Resistant | | | | | | | | |
| RoHS | Yes | | | | | | | | |
| **INSTALLATION SPECIFICATIONS** | | | | | | | | | |
| Maximum Allowed System Voltage | 1000 | | | | | | | | Vdc |
| Compatible inverters | All SolarEdge Single Phase and Three Phase inverters | | | | | | | | |
| Dimensions (W x L x H) | 129 x 153 x 27.5 / 5.1 x 6 x 1.1 | | 129 x 153 x 33.5 / 5.1 x 6 x 1.3 | 129 x 153 x 29.5 / 5.1 x 6 x 1.16 | 129 x 159 x 49.5 / 5.1 x 6.3 x 1.9 | | | 129 x 162 x 59 / 5.1 x 6.4 x 2.3 | mm / in |
| Weight (including cables) | 630 / 1.4 | | 750 / 1.7 | 655 / 1.5 | 845 / 1.9 | | | 1064 / 2.3 | gr / lb |
| Input Connector | MC4[3] | | | | | | Single or dual MC4[3][4] | MC4[3] | |
| Input Wire Length | 0.16 / 0.52 | | | 0.16 or 0.9 /0.52 or 2.95[5] | 0.16 / 0.52 | | | | m / ft |
| Output Wire Type / Connector | Double Insulated / MC4 | | | | | | | | |
| Output Wire Length | 0.9 / 2.95 | 1.2 / 3.9 | | | | | | | m / ft |
| Operating Temperature Range[6] | -40 to +85 / -40 to +185 | | | | | | | | °C / °F |
| Protection Rating | IP68 / NEMA6P | | | | | | | | |
| Relative Humidity | 0 - 100 | | | | | | | | % |

(1) Rated power of the module at STC will not exceed the optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed
(2) NEC 2017 requires max input voltage be not more than 80V
(3) For other connector types please contact SolarEdge
(4) For dual version for parallel connection of two modules use P485-4NMDMRM. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer connected to one PV module. When connecting a single module seal the unused input connectors with the supplied pair of seals
(5) Longer inputs wire length are available for use. For 0.9m input wire length order P401-xxxLxxx
(6) For ambient temperature above +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details

| PV System Design Using a SolarEdge Inverter[7][8] | | Single Phase HD-Wave | Single phase | Three Phase for 208V grid | Three Phase for 277/480V grid | |
|---|---|---|---|---|---|---|
| Minimum String Length (Power Optimizers) | P320, P340, P370, P400, P401 | 8 | | 10 | 18 | |
| | P405, P485, P505 | 6 | | 8 | 14 | |
| Maximum String Length (Power Optimizers) | | 25 | | 25 | 50[9] | |
| Maximum Power per String | | 5700 (6000 with SE7600-US - SE11400-US) | 5250 | 6000[10] | 12750[11] | W |
| Parallel Strings of Different Lengths or Orientations | | Yes | | | | |

(7) For detailed string sizing information refer to: http://www.solaredge.com/sites/default/files/string_sizing_na.pdf
(8) It is not allowed to mix P405/P485/P505 with P320/P340/P370/P400/P401 in one string
(9) A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement
(10) For 208V grid: it is allowed to install up to 6,500W per string when the maximum power difference between each string is 1,000W
(11) For 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W

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Intertek RoHS

Fluent SOLAR

ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

OPTIMIZER

CS-2

# Single Phase Inverter with HD-Wave Technology

## for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US /
SE7600H-US / SE10000H-US / SE11400H-US

INVERTERS




## Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking 99% weighted efficiency
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020 per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Small, lightweight, and easy to install both outdoors or indoors
- Built-in module-level monitoring
- Optional: Faster installations with built-in consumption metering (1% accuracy) and production revenue grade metering (0.5% accuracy, ANSI C12.20)

solaredge.com

solaredge

# Single Phase Inverter with HD-Wave Technology

## for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/
SE7600H-US / SE10000H-US / SE11400H-US

| MODEL NUMBER | SE3000H-US | SE3800H-US | SE5000H-US | SE6000H-US | SE7600H-US | SE10000H-US | SE11400H-US | |
|---|---|---|---|---|---|---|---|---|
| APPLICABLE TO INVERTERS WITH PART NUMBER | SEXXXXH-XXXXXBXX4 | | | | | | | |
| **OUTPUT** | | | | | | | | |
| Rated AC Power Output | 3000 | 3800 @ 240V<br>3300 @ 208V | 5000 | 6000 @ 240V<br>5000 @ 208V | 7600 | 10000 | 11400 @ 240V<br>10000 @ 208V | VA |
| Maximum AC Power Output | 3000 | 3800 @ 240V<br>3300 @ 208V | 5000 | 6000 @ 240V<br>5000 @ 208V | 7600 | 10000 | 11400 @ 240V<br>10000 @ 208V | VA |
| AC Output Voltage Min.-Nom.-Max. (211 - 240 - 264) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | Vac |
| AC Output Voltage Min.-Nom.-Max. (183 - 208 - 229) | - | ✓ | - | ✓ | - | - | ✓ | Vac |
| AC Frequency (Nominal) | 59.3 - 60 - 60.5[1] | | | | | | | Hz |
| Maximum Continuous Output Current @240V | 12.5 | 16 | 21 | 25 | 32 | 42 | 47.5 | A |
| Maximum Continuous Output Current @208V | - | 16 | - | 24 | - | - | 48.5 | A |
| Power Factor | 1, Adjustable - 0.85 to 0.85 | | | | | | | |
| GFDI Threshold | 1 | | | | | | | A |
| Utility Monitoring, Islanding Protection, Country Configurable Thresholds | Yes | | | | | | | |
| **INPUT** | | | | | | | | |
| Maximum DC Power @240V | 4650 | 5900 | 7750 | 9300 | 11800 | 15500 | 17650 | W |
| Maximum DC Power @208V | - | 5100 | - | 7750 | - | - | 15500 | W |
| Transformer-less, Ungrounded | Yes | | | | | | | |
| Maximum Input Voltage | 480 | | | | | | | Vdc |
| Nominal DC Input Voltage | 380 | | | | 400 | | | Vdc |
| Maximum Input Current @240V[2] | 8.5 | 10.5 | 13.5 | 16.5 | 20 | 27 | 30.5 | Adc |
| Maximum Input Current @208V[2] | - | 9 | - | 13.5 | - | - | 27 | Adc |
| Max. Input Short Circuit Current | 45 | | | | | | | Adc |
| Reverse-Polarity Protection | Yes | | | | | | | |
| Ground-Fault Isolation Detection | 600kΩ Sensitivity | | | | | | | |
| Maximum Inverter Efficiency | 99 | 99.2 | | | | | | % |
| CEC Weighted Efficiency | 99 | | | | | | 99 @ 240V<br>98.5 @ 208V | % |
| Nighttime Power Consumption | < 2.5 | | | | | | | W |

(1) For other regional settings please contact SolarEdge support
(2) A higher current source may be used; the inverter will limit its input current to the values stated

# Single Phase Inverter with HD-Wave Technology

## for North America

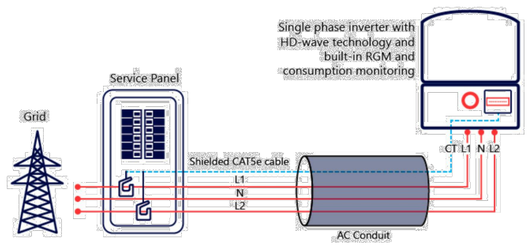
SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/
SE7600H-US / SE10000H-US / SE11400H-US

| MODEL NUMBER | SE3000H-US | SE3800H-US | SE5000H-US | SE6000H-US | SE7600H-US | SE10000H-US | SE11400H-US | |
|---|---|---|---|---|---|---|---|---|
| **ADDITIONAL FEATURES** | | | | | | | | |
| Supported Communication Interfaces | RS485, Ethernet, ZigBee (optional), Cellular (optional) | | | | | | | |
| Revenue Grade Metering, ANSI C12.20 | Optional[3] | | | | | | | |
| Consumption metering | | | | | | | | |
| Inverter Commissioning | With the SetApp mobile application using Built-in Wi-Fi Access Point for Local Connection | | | | | | | |
| Rapid Shutdown - NEC 2014, NEC 2017 and NEC 2020, 690.12 | Automatic Rapid Shutdown upon AC Grid Disconnect | | | | | | | |
| **STANDARD COMPLIANCE** | | | | | | | | |
| Safety | UL1741, UL1741 SA, UL16998, CSA C22.2, Canadian AFCI according to T.I.L. M-07 | | | | | | | |
| Grid Connection Standards | IEEE1547, Rule 21, Rule 14 (HI) | | | | | | | |
| Emissions | FCC Part 15 Class B | | | | | | | |
| **INSTALLATION SPECIFICATIONS** | | | | | | | | |
| AC Output Conduit Size / AWG Range | 1" Maximum / 14-6 AWG | | | | | 1" Maximum /14-4 AWG | | |
| DC Input Conduit Size / # of Strings / AWG Range | 1" Maximum / 1-2 strings / 14-6 AWG | | | | | 1" Maximum / 1-3 strings / 14-6 AWG | | |
| Dimensions with Safety Switch (HxWxD) | 17.7 x 14.6 x 6.8 / 450 x 370 x 174 | | | | | 21.3 x 14.6 x 7.3 / 540 x 370 x 185 | | in / mm |
| Weight with Safety Switch | 22 / 10 | 25.1 / 11.4 | 26.2 / 11.9 | | | 38.8 / 17.6 | | lb / kg |
| Noise | < 25 | | | | < 50 | | | dBA |
| Cooling | Natural Convection | | | | | | | |
| Operating Temperature Range | -40 to +140 / -40 to +60[4] | | | | | | | °F / °C |
| Protection Rating | NEMA 4X (Inverter with Safety Switch) | | | | | | | |

(3) Inverter with Revenue Grade Meter P/N: SExxxxH-US000BNC4; Inverter with Revenue Grade Production and Consumption Meter P/N: SExxxxH-US000BNI4 . For consumption metering, current transformers should be ordered separately: SEACT0750-200NA-20 or SEACT0750-400NA-20. 20 units per box
(4) Full power up to at least 50°C / 122°F; for power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf

## How to Enable Consumption Monitoring

By simply wiring current transformers through the inverter's existing AC conduits and connecting them to the service panel, homeowners will gain full insight into their household energy usage helping them to avoid high electricity bills

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RoHS

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

SYSTEM SIZE: 5.11 KW (E-1)
( 14 ) URE - F6M365E7G-BB (CS-1)
( 1 ) SOLAREDGE - SE3800H-US (CS-2)
( 14 ) SOLAREDGE - P401 (CS-3)
ROOF TYPE: COMP SHINGLE (PV-2)
RAFTERS, 2X4 @ 24" (PV-2)
INTERCONNECTION METHOD: RATED BACK FED TAP

CUSTOMER LAST NAME: STEWART
ADDRESS: 13519 CORBY RD
CITY: CLEVELAND
STATE: OH
ZIP: 44120
JURISDICTION: Cleveland
UTILITY COMPANY: FIRST ENERGY

DESIGNED BY: DA
DESIGNED ON
1/14/2022

INVERTER

CS-3

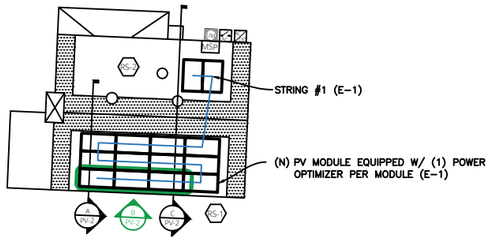
# CAUTION

## MULTIPLE SOURCES OF POWER

LEGEND:
- =UTILITY METER
- =MAIN SERVICE PANEL
- =AC DISCONNECT
- =INVERTER

INVERTER POWER RATING: 3.80 kW
PANEL POWER RATING: 365 W

TRUE NORTH




DRIVEWAY
13519 CORBY RD

HATCHED AREA WILL PROVIDE A 3' FIRECODE PATHWAY TO COMPLY WITH IFC 605.11.3.2.1

2020 NEC
LABEL (FOR FIELD USE ONLY)

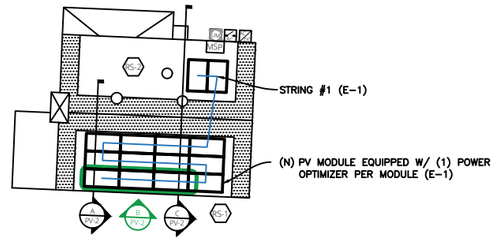
# CAUTION

POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECTS LOCATED AS SHOWN

LEGEND:
- =UTILITY METER
- =MAIN SERVICE PANEL
- =AC DISCONNECT
- =INVERTER

INVERTER POWER RATING: 3.80 kW
PANEL POWER RATING: 365 W

TRUE NORTH




DRIVEWAY
13519 CORBY RD

HATCHED AREA WILL PROVIDE A 3' FIRECODE PATHWAY TO COMPLY WITH IFC 605.11.3.2.1

2017 NEC
LABEL (FOR FIELD USE ONLY)

Fluent SOLAR
ADDRESS: 2578 W 600 N
SUITE 100 LINDON, UT 84042
PHONE: 866-736-1253

| | |
|---|---|
| SYSTEM SIZE: | 5.11 KW (E-1) |
| | ( 14 ) URE - F6M365E7G-BB (CS-1) |
| | ( 1 ) SOLAREDGE - SE3800H-US (CS-2) |
| | ( 14 ) SOLAREDGE - P401 (CS-3) |
| | ROOF TYPE: COMP SHINGLE (PV-2) |
| | RAFTERS, 2X4 @ 24" (PV-2) |
| | INTERCONNECTION METHOD: RATED BACK FED TAP |
| CUSTOMER LAST NAME: | STEWART |
| ADDRESS: | 13519 CORBY RD |
| CITY: | CLEVELAND |
| STATE: | OH |
| ZIP: | 44120 |
| JURISDICTION: | Cleveland |
| UTILITY COMPANY: | FIRST ENERGY |

DESIGNED BY: DA
DESIGNED ON
1/14/2022

PLACARD

PL-1

# Certificates of Appropriateness

March 24, 2022

**Case 22-029:** Superior Viaduct
**Apollo Apartments 1250 Riverbed Road**
Renovations and Landscaping adjacent to Viaduct
Ward 3: McCormack
Project Representatives: Ron Tannenbaum, RDL Architects; Michael Apt, Apt92; Kevin Kelley, Porter Wright




# SD0.1 EXISTING CONDITIONS - AERIAL VIEW

NORTH

SCALE: 1" = 50'
0 10' 20' 30' 40' 50'

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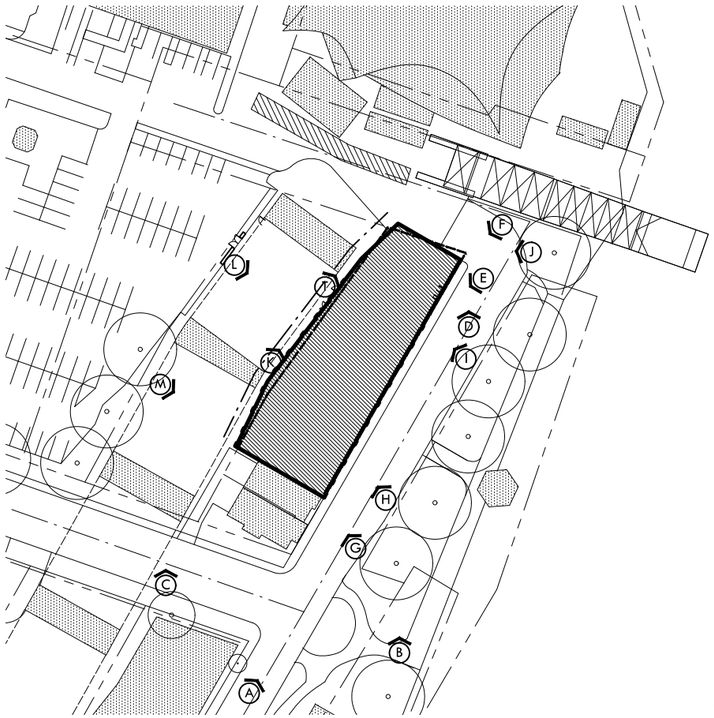
RDL ARCHITECTS
**RDL ARCHITECTS**
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

**APOLLO APARTMENTS**
1250 RIVERBED STREET
CLEVELAND, OHIO

APT 92
APT DEVELOPMENT GROUP
CLEVELAND, OHIO
www.aptdevelopmentgroupllc.org




NORTH SCALE: 1" = 100'

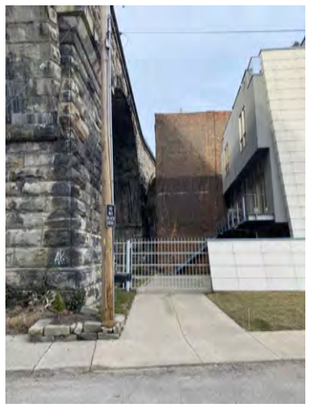
0 20' 40' 60' 80' 100'



A



B



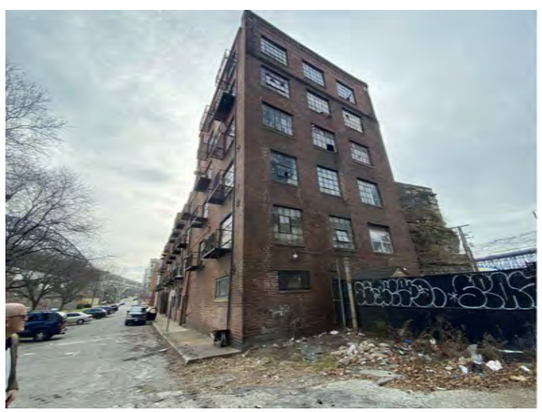
C



D




E



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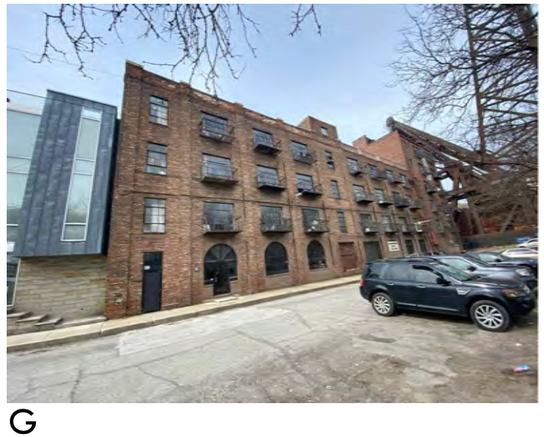

G



H



I



J

# SD0.2 EXISTING CONDITIONS & CONTEXT

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

**APOLLO APARTMENTS**
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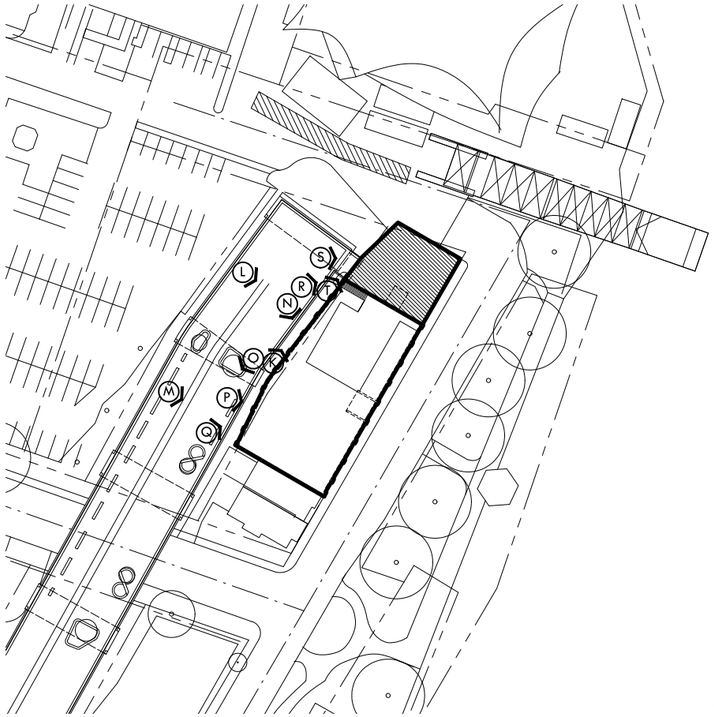



NORTH SCALE: 1" = 100'

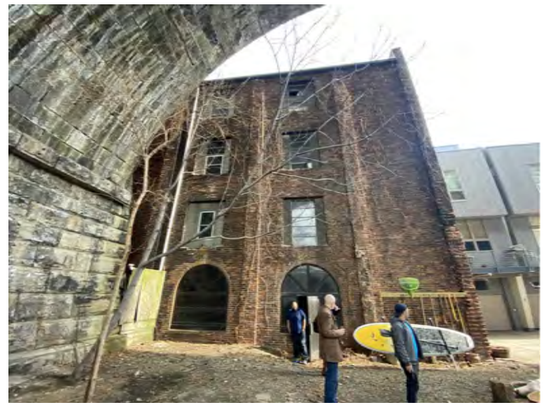
0 20' 40' 60' 80' 100'



K



L



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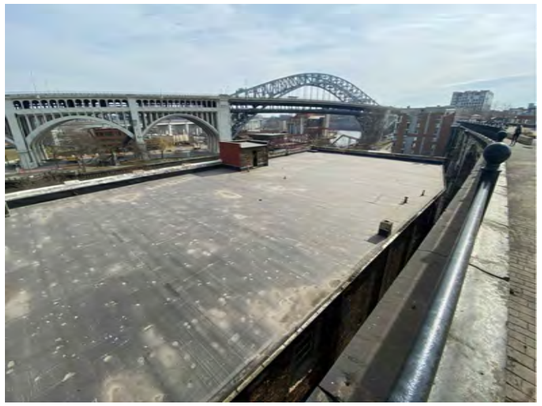

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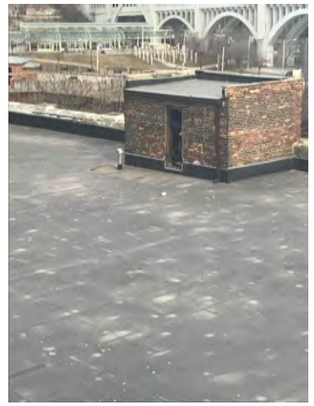

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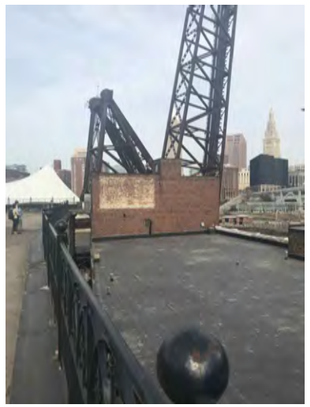

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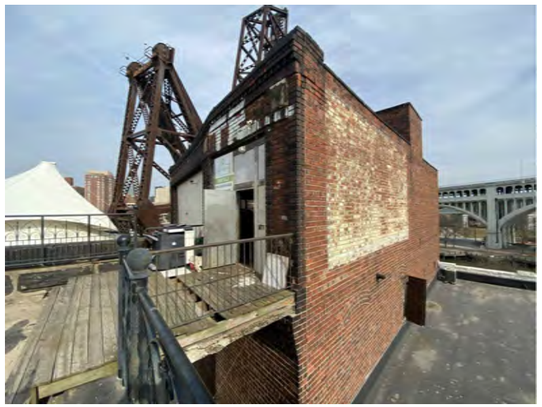

R



S



T

# SD0.3 EXISTING CONDITIONS & CONTEXT

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

**APOLLO APARTMENTS**
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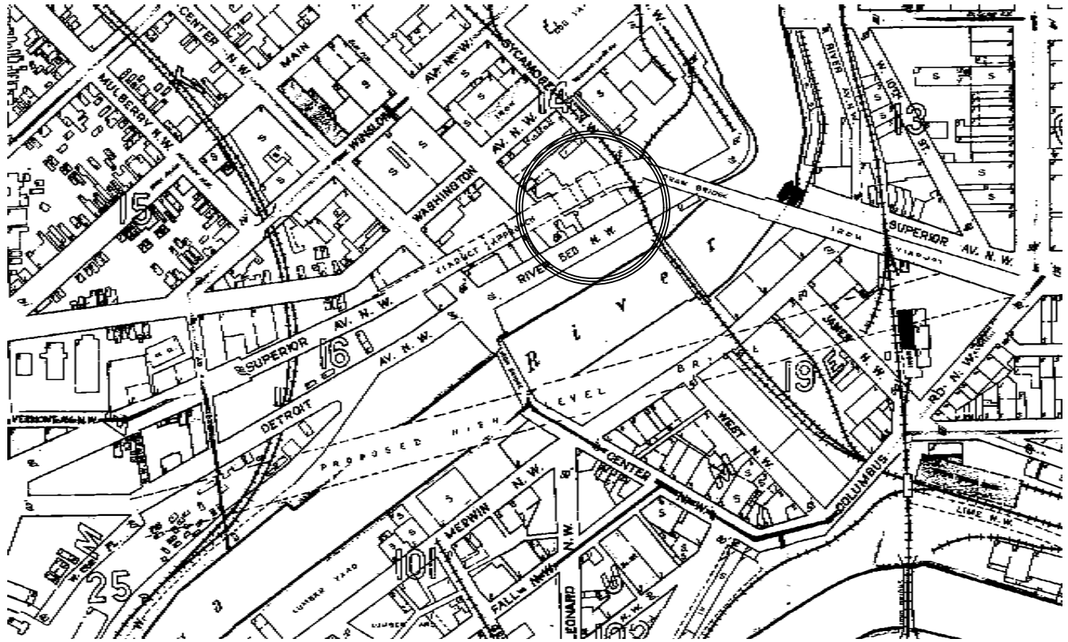
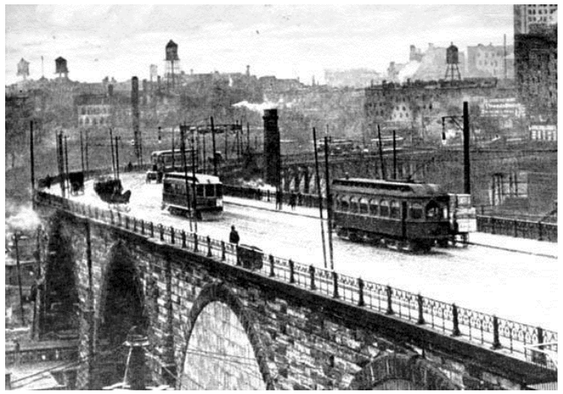


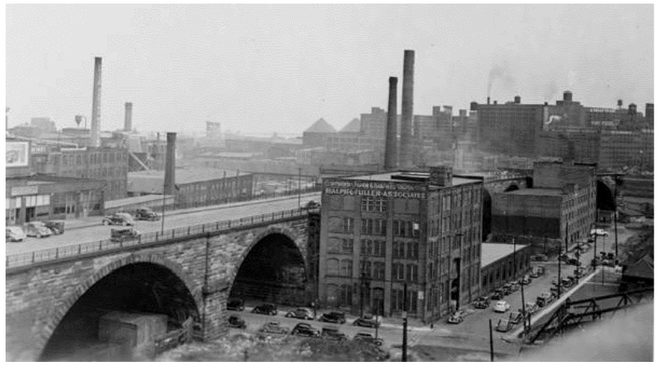

Sanborn Fire Insurance Map, 1916



Historic American Engineering Record, Library of Congress



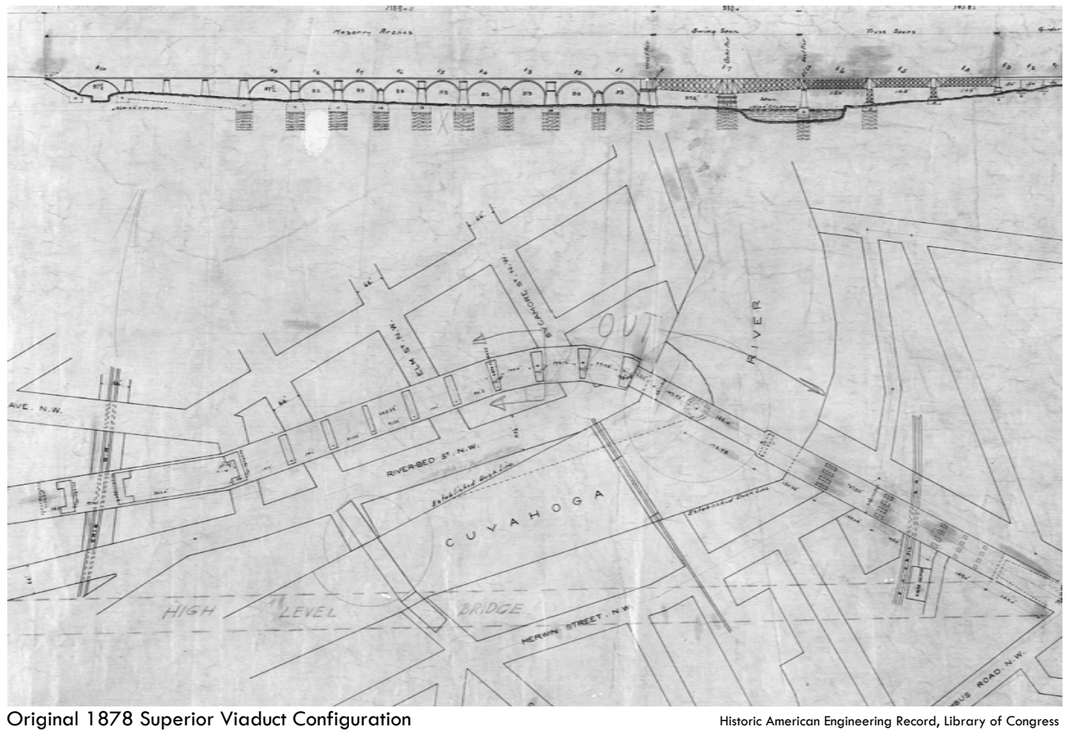
Gerald E. Brookins Collection, clevelandmemory.org



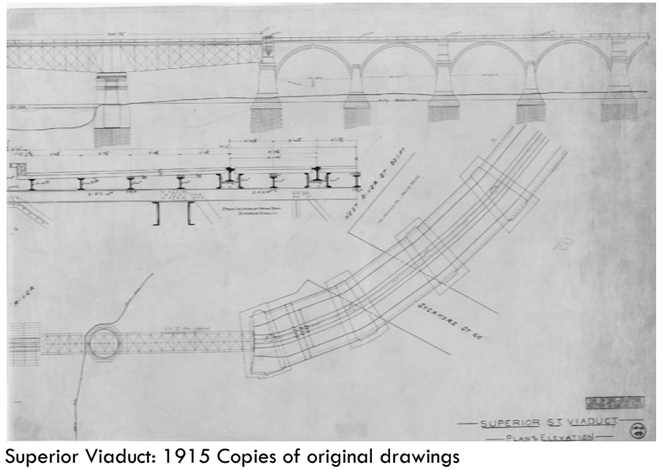
Date unk., circa 1940s  Cuyahoga Co. Engineer's Photography Collection, clevelandmemory.org



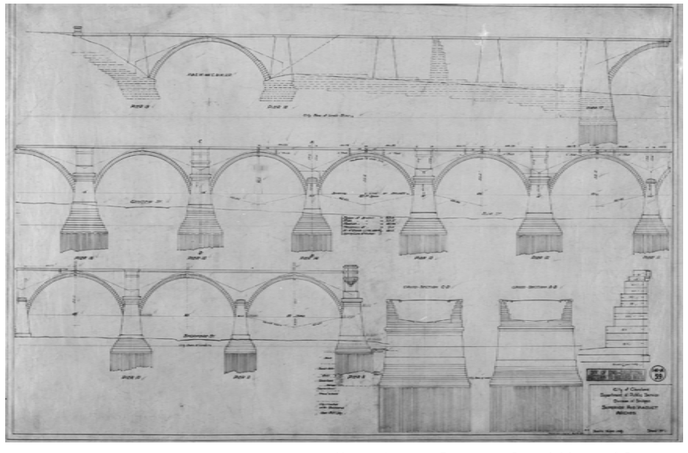
View circa 1978  Historic American Engineering Record, Library of Congress




Original 1878 Superior Viaduct Configuration  Historic American Engineering Record, Library of Congress




Superior Viaduct: 1915 Copies of original drawings



Historic American Engineering Record, Library of Congress

# SD0.4 SITE HISTORY

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

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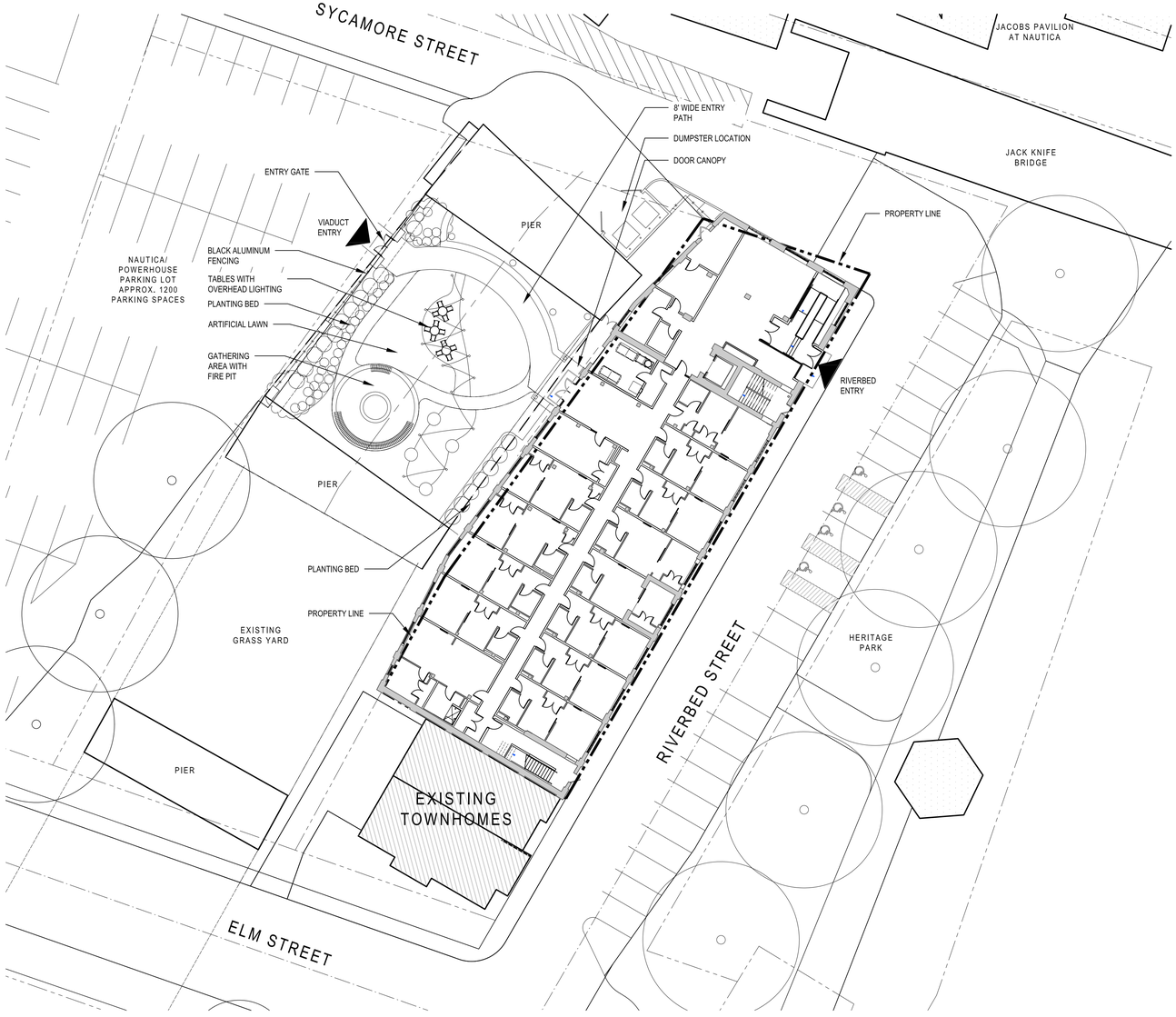


1 / A1.00 SITE PLAN

SCALE: 1" = 20'-0"

## SITE DATA:

| | | |
|---|---|---|
| ZONING USE DIST. | LLR: LIMITED RETAIL BUSINESS WITH URBAN FORM OVERLAY | |
| AREA DISTRICT: | K (6x LOT AREA) | |
| HEIGHT DISTRICT: | 5 (250 FT. MAX) | |
| PROPOSED USE | RESIDENTIAL, OFFICE | |
| ACREAGE | +/- 0.253 ACRES (11,020 SF) | |
| PROPOSED UNITS | 70 UNITS | |
| TOTAL FL AREA | +/- 50,984 GSF | |
| BUILDING FOOTPRINT | +/- 11,379 SF (100% COVERAGE) | |
| ON-SITE PARKING | 1 PER DWELLING UNIT = 70 SPACES<br>1 PER 500 SF OFFICE = 3 SPACES<br>75% REDUCTION PER UF OVERLAY<br>.25 X 73 = 19 SPACES REQ'D<br>**NONE PROVIDED, VARIANCE REQ'D** | |
| OFF-STREET PARKING | RIVERBED ST. | 23 SPACES |
| HISTORIC DISTRICT: | CLEVELAND CENTRE<br>NATIONAL HISTORIC DISTRICT<br>LISTED CONTRIBUTING STRUCTURE | |

GENERAL NOTES:
REFER TO CIVIL DRAWINGS FOR COMPLETE SITE INFORMATION INCLUDING PARKING LAYOUTS, PAVEMENT TYPES, SIGNAGE AND SITE DETAILS.

RDL ARCHITECTS
16102 Chagrin Blvd, Suite 200
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FAX: 216-752-4301
www.RDLarchitects.com

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CLEVELAND, OH
www.aptdevelopmentgroupllc.org

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## ISSUE

| | | |
|---|---|---|
| △ | 100% SD SET | 08.30.2021 |
| △ | 100% DD SET | 11.08.2021 |
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SITE PLAN

N

SCALE: 1" = 20'-0"

0 5' 10' 20'

| | |
|---|---|
| PROJECT # | 21028 |
| DRAWN BY | |
| CHECKED BY | RDL |
| FILE NAME | |
| PLOT DATE | March 8, 2022 |

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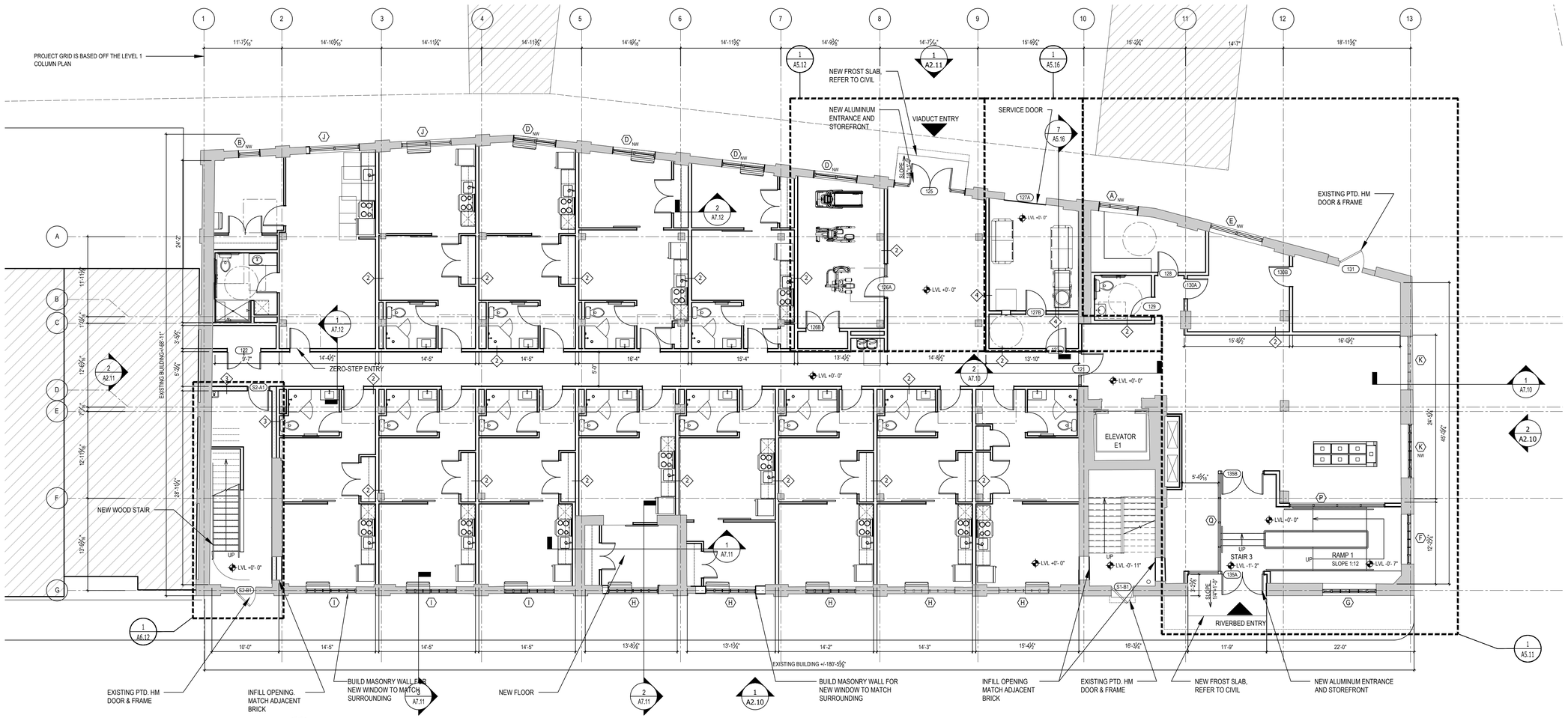


1 A1.11 FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE "X" GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
- DEMOLITION

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16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
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## ISSUE

| | |
|---|---|
| 100% SD SET | 08.30.2021 |
| 100% DD SET | 11.08.2021 |

FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

N

0 2' 4' 8' 16'

| | |
|---|---|
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| DRAWN BY | |
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| FILE NAME | |
| PLOT DATE | March 8, 2022 |

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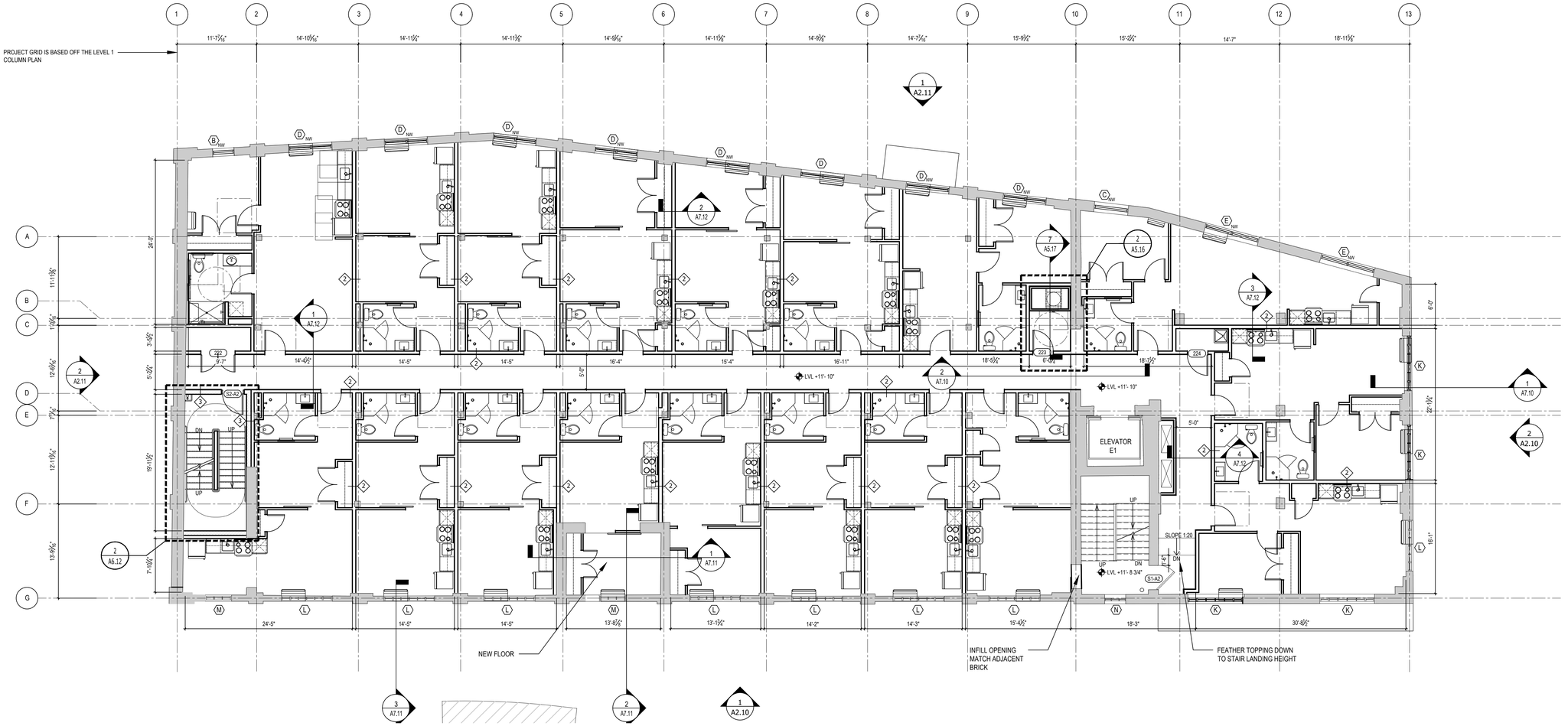


1 SECOND FLOOR PLAN
A1.12
SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE 'X' GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
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RDL ARCHITECTS
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## ISSUE

| | | |
|---|---|---|
| 1 | 100% SD SET | 08.30.2021 |
| 2 | 100% DD SET | 11.08.2021 |

SECOND FLOOR PLAN

N

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16'

| | |
|---|---|
| PROJECT # | 21028 |
| DRAWN BY | |
| CHECKED BY | RDL |
| FILE NAME | |
| PLOT DATE | March 8, 2022 |

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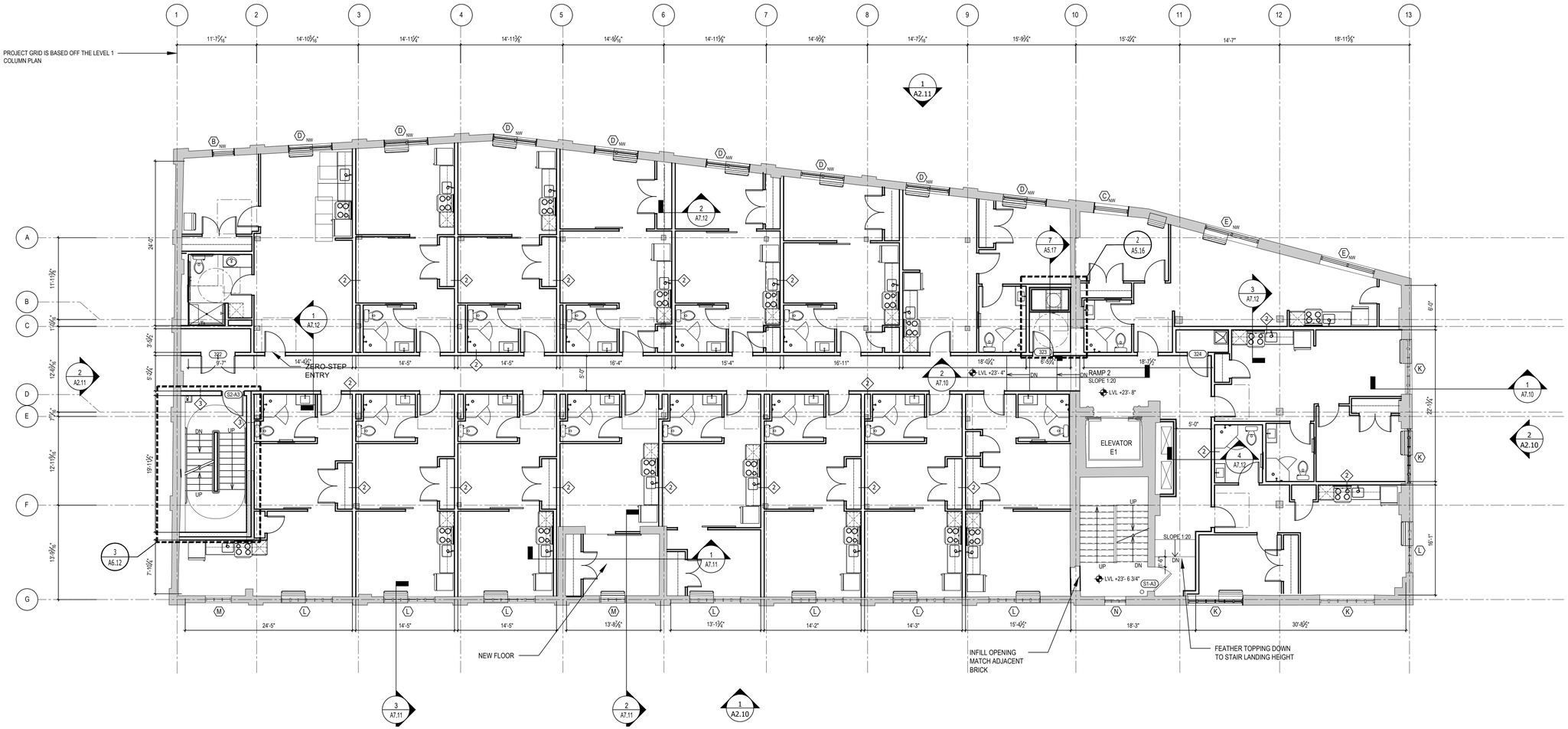
A1.12




1 A1.13 THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE 'X' GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
- DEMOLITION

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16102 Chagrin Blvd. Suite 200
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## ISSUE

| | |
|---|---|
| 100% SD SET | 08.30.2021 |
| 100% DD SET | 11.08.2021 |

THIRD FLOOR PLAN

N

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16'

| | |
|---|---|
| PROJECT # | 21028 |
| DRAWN BY | |
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| FILE NAME | |
| PLOT DATE | March 8, 2022 |

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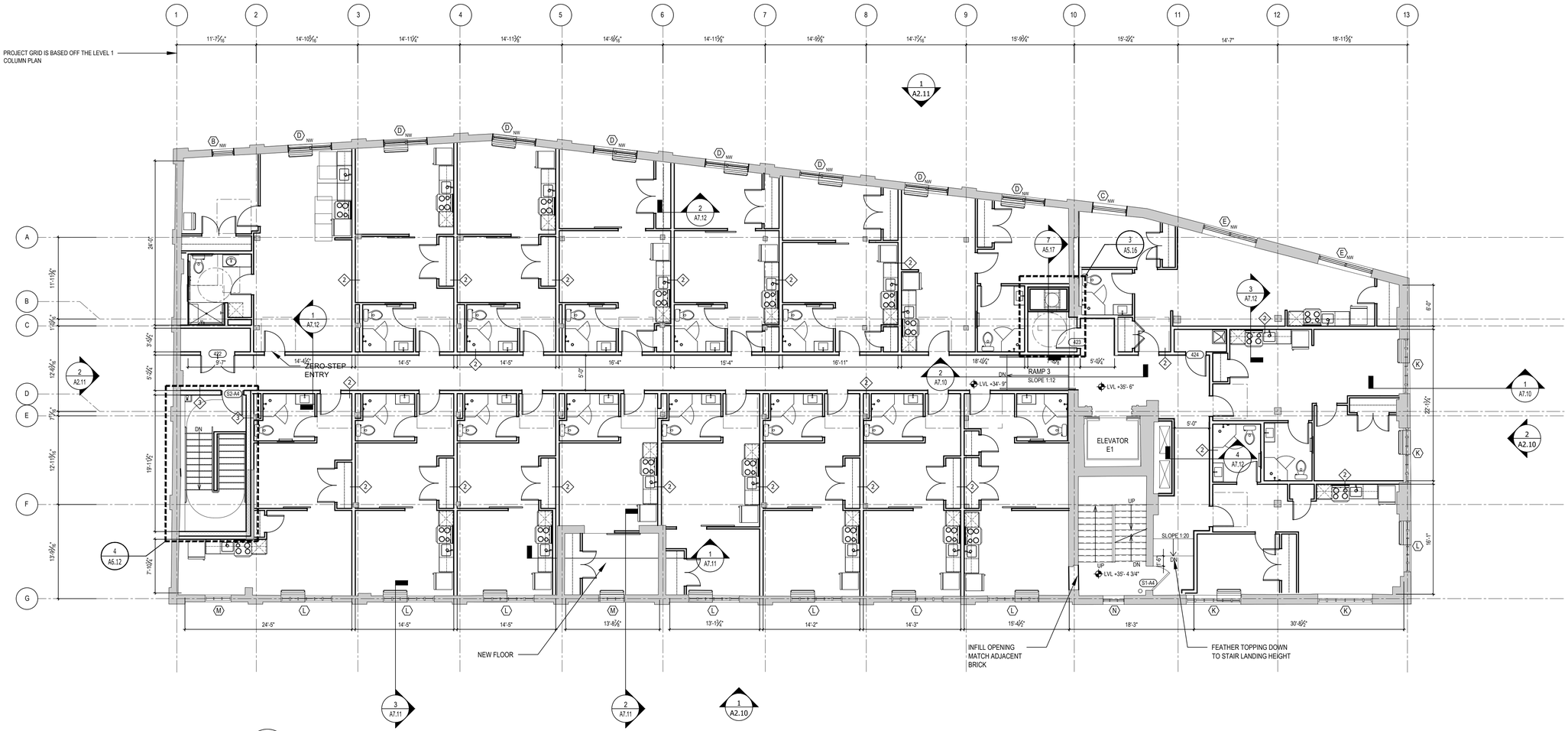


1 A1.14 FOURTH FLOOR PLAN

SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE 'X' GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
- DEMOLITION

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## ISSUE

| | |
|---|---|
| 100% SD SET | 08.30.2021 |
| 100% DD SET | 11.08.2021 |

FOURTH FLOOR PLAN

N

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16'

| | |
|---|---|
| PROJECT # | 21028 |
| DRAWN BY | |
| CHECKED BY | RDL |
| FILE NAME | |
| PLOT DATE | March 8, 2022 |

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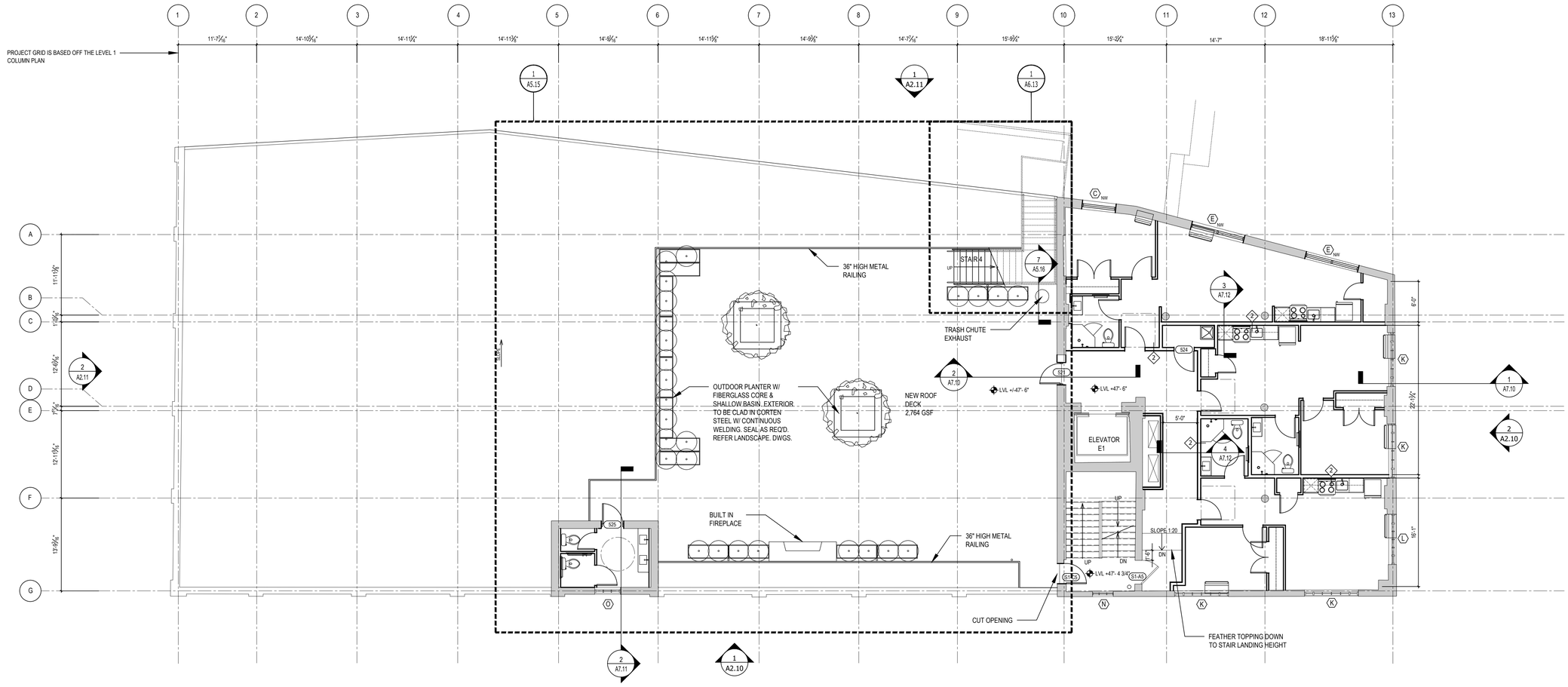


1 A1.15 FIFTH FLOOR PLAN

SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE 'X' GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
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## ISSUE

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|---|---|
| 100% SD SET | 08.30.2021 |
| 100% DD SET | 11.08.2021 |

FIFTH FLOOR PLAN

N

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16'

| | |
|---|---|
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| PLOT DATE | March 8, 2022 |

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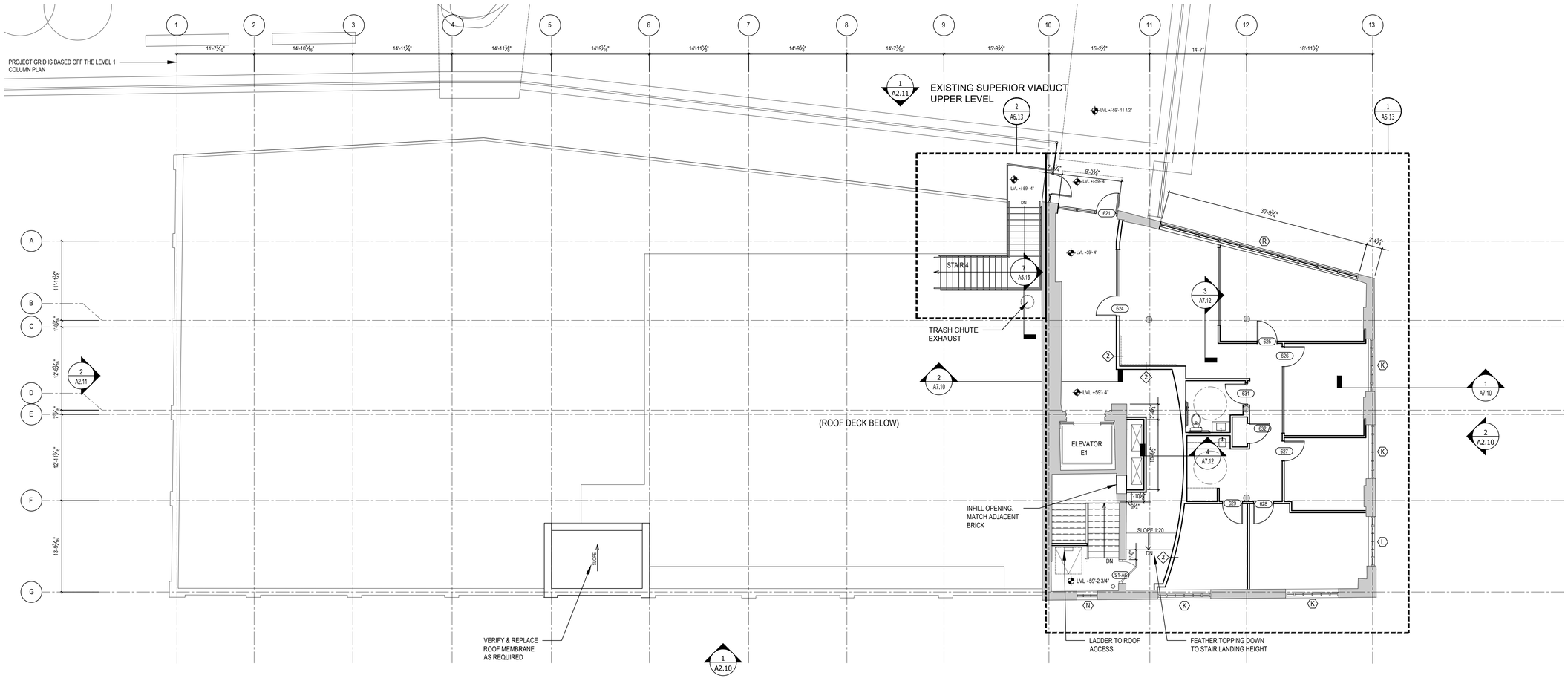


1 A1.16 SIXTH FLOOR PLAN

SCALE: 1/8" = 1'-0"

## WALL TYPE LEGEND :

1A TYPICAL 2X4 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X4 WOOD STUD FRAMING SPACED 16" O.C.

1B TYPICAL CHASE WALL:
5/8" GYPSUM BOARD ON ONE SIDE OF 2X WOOD STUD FRAMING SPACED 16" O.C.

1C TYPICAL 2X6 INTERIOR WALL:
5/8" GYPSUM BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING SPACED 16" O.C.

2 TYPICAL UNIT DEMISING / CORRIDOR WALL:
(1 HOUR RATING-UL DESIGN NO. 311. MIN STC 56)
5/8" TYPE "X" GYPSUM BOARD EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C. W/ 1/2" RESILIENT CHANNELS ON ONE SIDE W/ MIN. 3 1/2" BATT INSULATION.

3 TYPICAL STAIR WALL:
8" NOMINAL CONCRETE BLOCK WALL WITH REINFORCING
- 5/8" GYP. BD. OVER 7/8" METAL FURRING @ 24" O.C. AT FINISHED INTERIOR SPACES

4 2-HOUR RATED WALL:
(2 HOUR RATING-UL DESIGN NO. 334, STC 62)
(2) LAYERS 5/8" TYPE 'X' GYPSUM WALL BOARD ON EACH SIDE OF 2X6 WOOD STUD FRAMING @ 16" O.C.

5 TYPICAL 2X6 EXTERIOR WALL:
(1-HR RATING PER UL DESIGN #U356)
EXTERIOR FINISH OVER WEATHER BARRIER ON 7/16" SHEATHING ON 2X6 STUDS @ 16" O.C W/ R-21 BATT INSULATION & VAPOR BARRIER ON INSIDE FACE AND 5/8" GYPSUM BOARD ON INTERIOR SIDE.

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

## LEGEND:

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- EXISTING DOOR
- NEW DOOR
- A — WALL TYPE, SEE SHEET A9.30 FOR PARTITION SCHEDULE
- 100 — DOOR NUMBER (SEE SHEET A9.10 FOR DOOR SCHED.)
- NW — NEW WINDOW OPENING (REFER TO ELEVATIONS AND SHEET A9.20 FOR WINDOW TYPES AND DETAILS)
- DEMOLITION

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
PHONE: 216-752-4300
FAX: 216-752-4301
www.RDLarchitects.com

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CLEVELAND, OH
www.aptdevelopmentgroupllc.org

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## ISSUE

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SIXTH FLOOR PLAN

N

SCALE: 1/8" = 1'-0"

0 2' 4' 8' 16'

| | |
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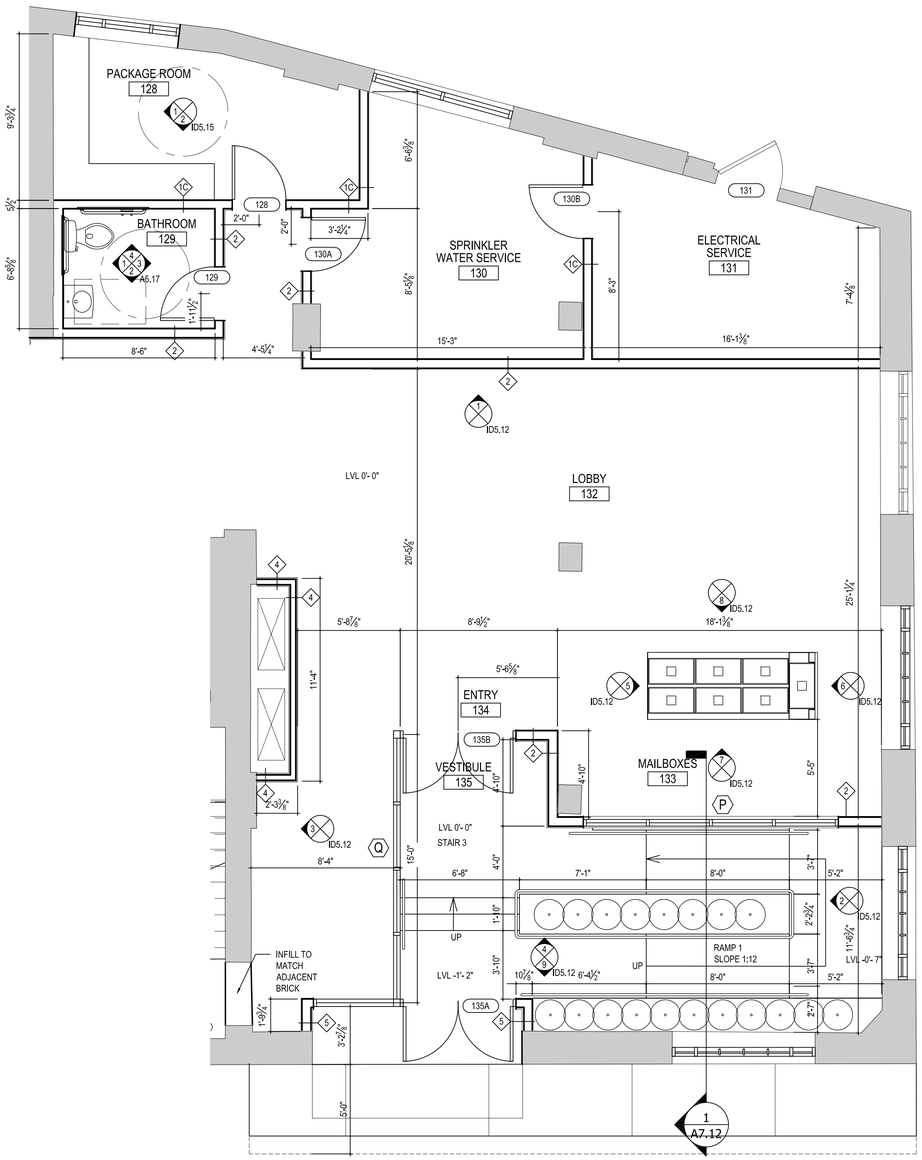


1 A5.11. ENLARGED PLAN

SCALE: 1/4" = 1'-0"

## GENERAL NOTES:

A. WALLS ARE DIMENSIONED TO FACE OF STUD. WINDOWS AND DOORS ARE DIMENSIONED TO OPENINGS AT BRICK.

B. NEW GYPCRETE LAYER IS DATUM +/-0'-0" FOR ALL FLOOR PLANS

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR MECHANICAL AND PLUMBING LOCATIONS.

D. PROVIDE 5/8" TYPE-X GYPSUM WALLBOARD ON RATED WALLS. PROVIDE 5/8" GYPSUM WALL BOARD ON ALL INTERIOR PARTITION WALLS. PROVIDE MOISTURE RESISTANT GYP. BOARD IN ALL BATHROOMS ON WET WALLS.

E. VERIFY ROUGH-IN DIMENSIONS FOR ALL APPLIANCES & PLUMBING FIXTURES PRIOR TO FRAMING PARTITIONS, ORDERING CABINETRY OR FABRICATING MILLWORK.

F. REFER TO ELEVATIONS AND WINDOW SCHEDULE FOR WINDOW TYPES & SIZES

G. REFER TO UNIT PLANS FOR INTERIOR WALL TYPES IN UNITS.

H. PROJECT GRID IS BASED OFF THE LEVEL 3 COLUMN PLAN.

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
PHONE: 216-752-4300
FAX: 216-752-4301
www.RDLarchitects.com

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ISSUE

ENLARGED PLANS

SCALE: 1/4" = 1'-0"

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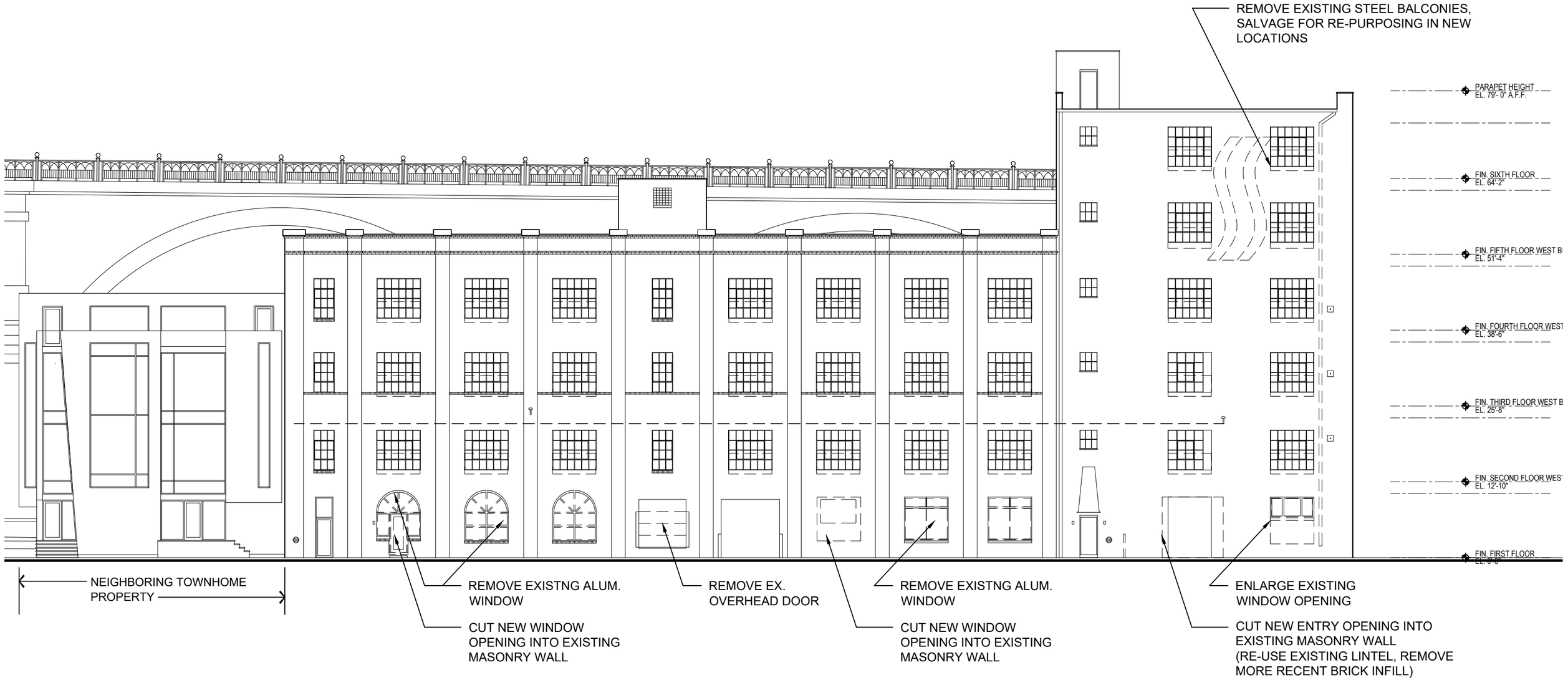


# A2.10 EAST ELEVATION - RIVERBED STREET - EXISTING CONDITIONS

SCALE: 1" = 16'
0 4' 8' 16'

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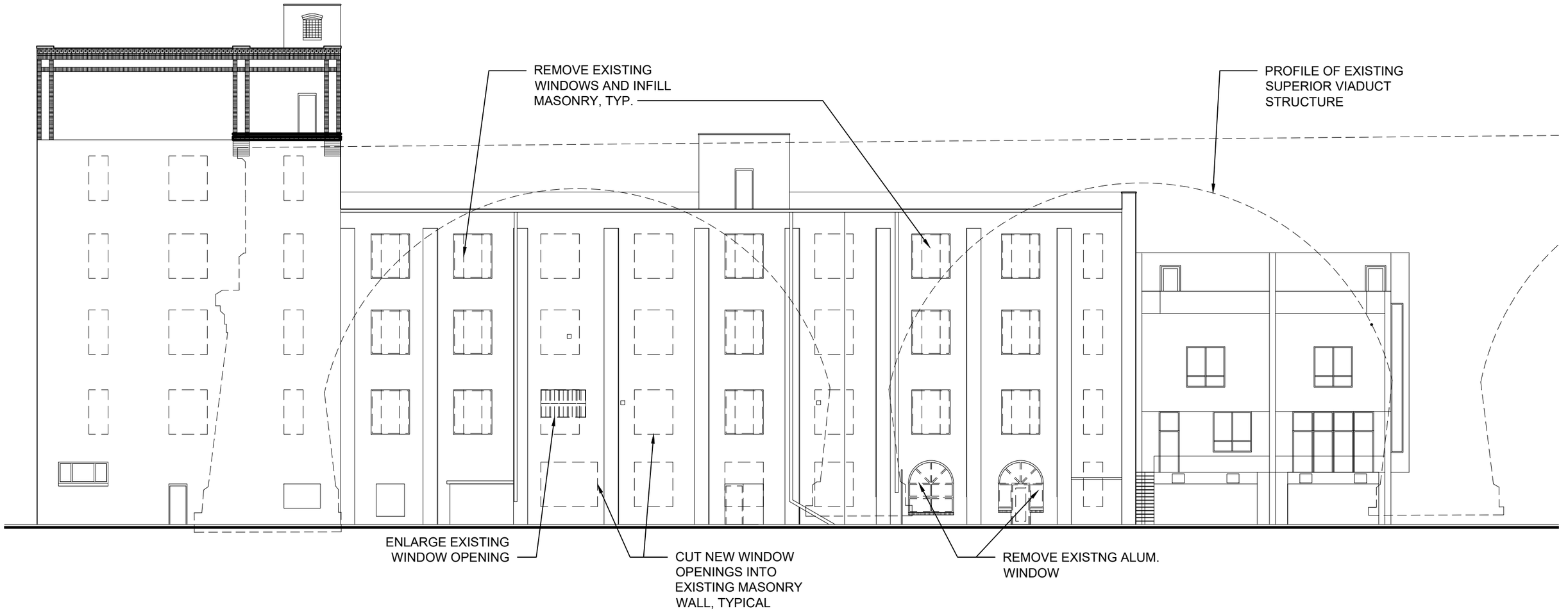


# A2.20 WEST ELEVATION - EXISTING CONDITIONS

SCALE: 1" = 16'
0 4' 8' 16'

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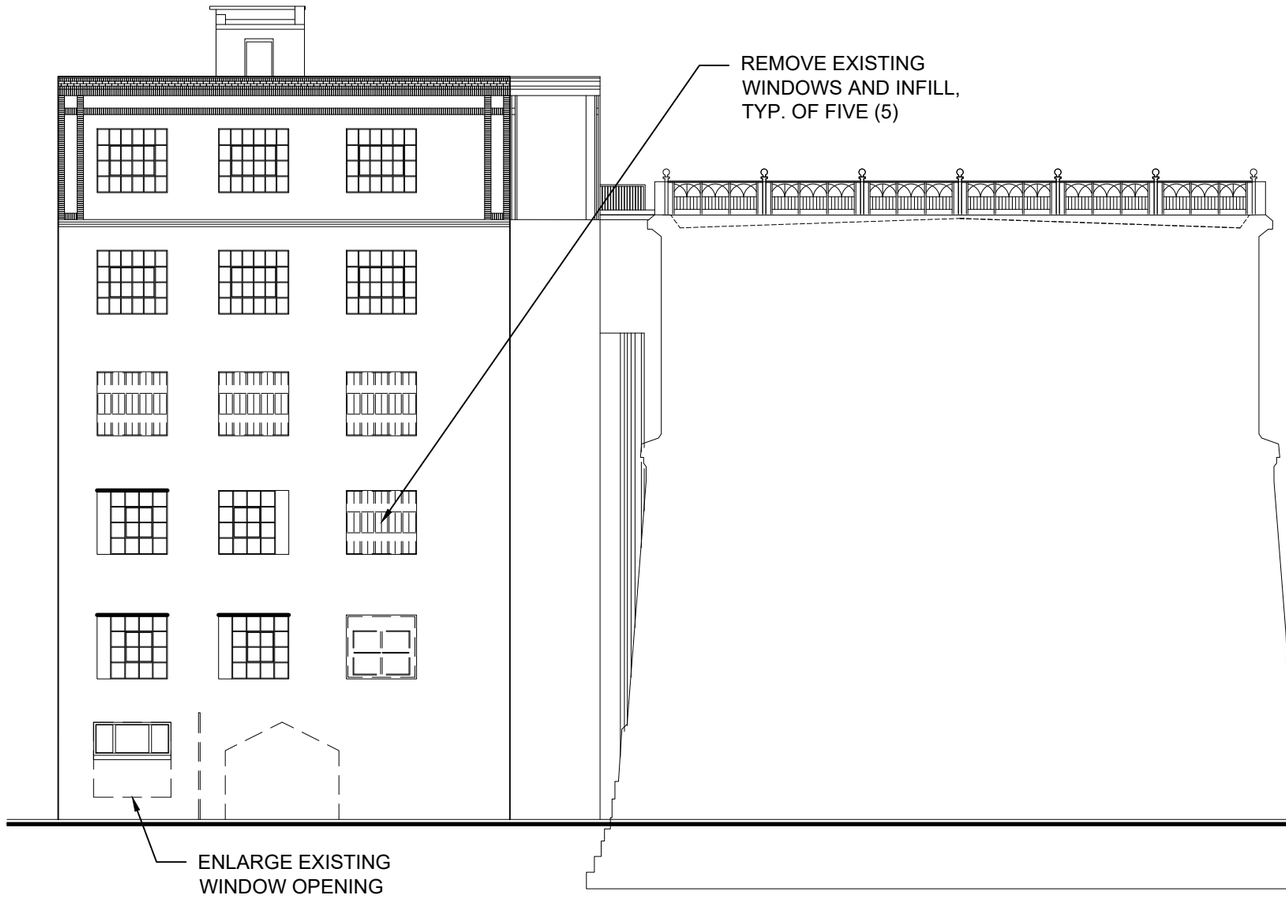
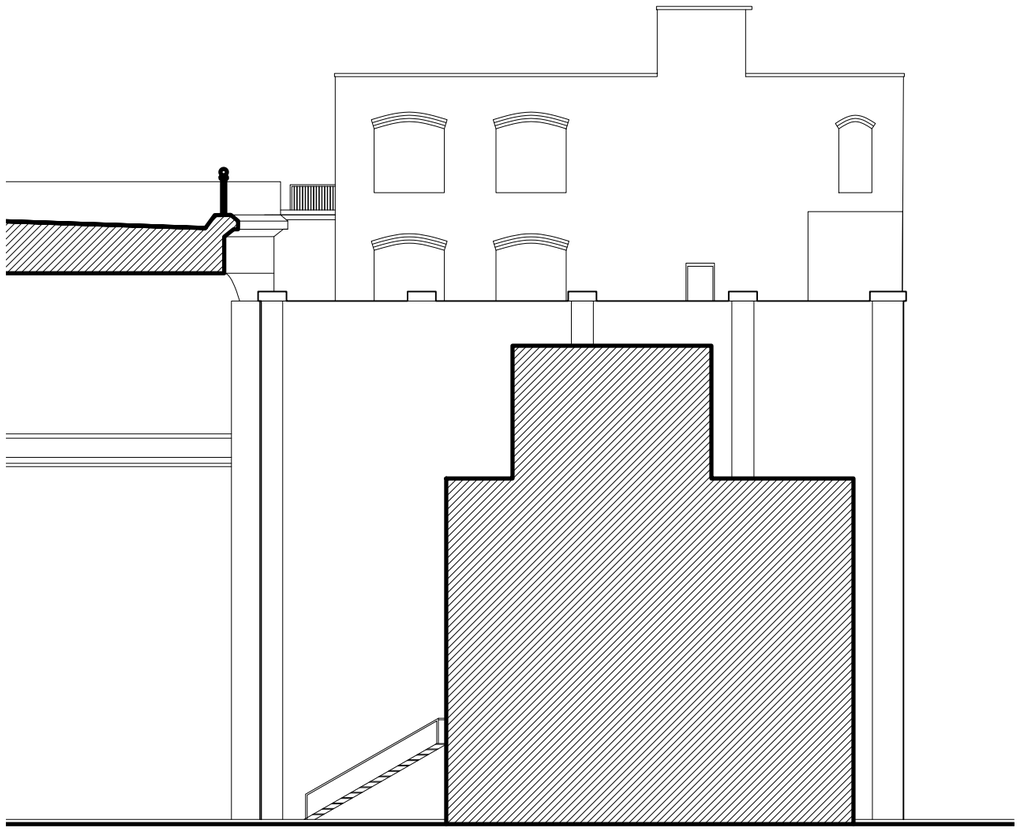



NORTH ELEVATION



SOUTH ELEVATION

# A2.30 NORTH AND SOUTH ELEVATIONS - EXISTING CONDITIONS

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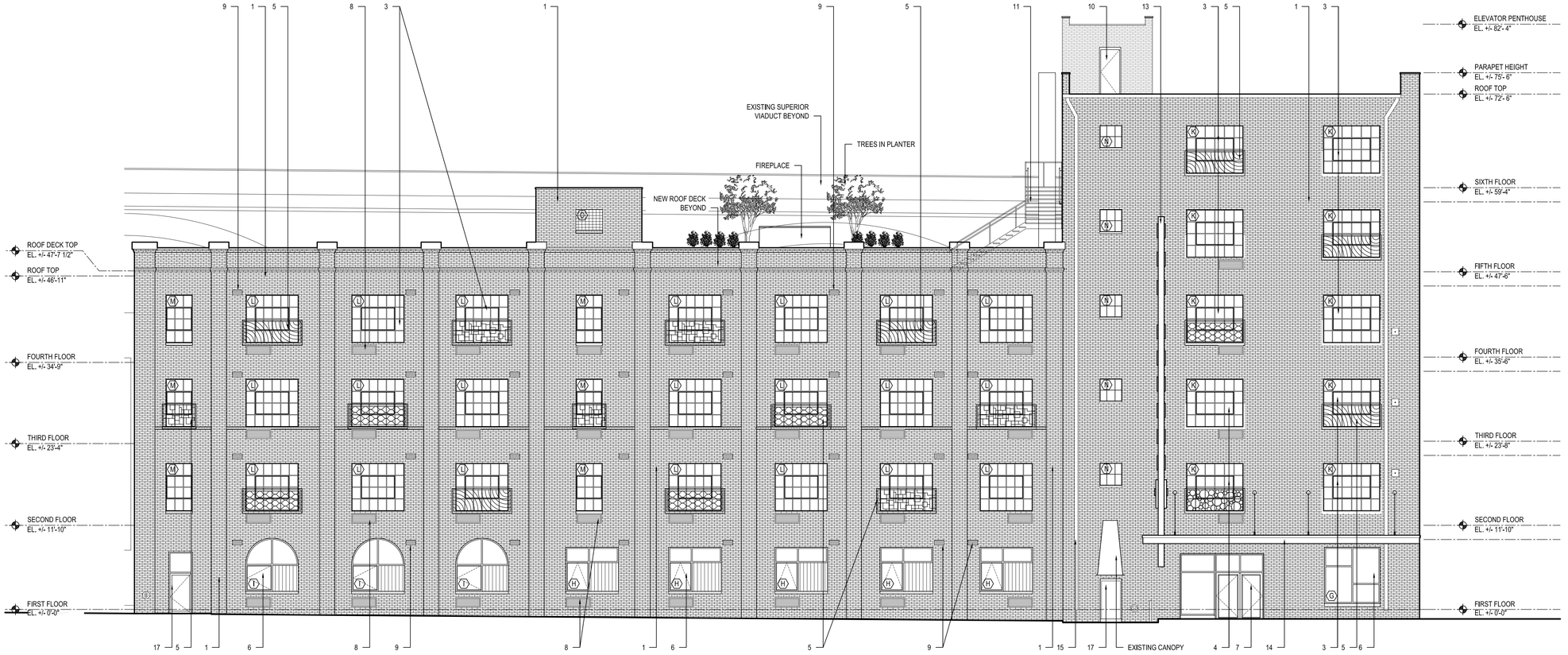
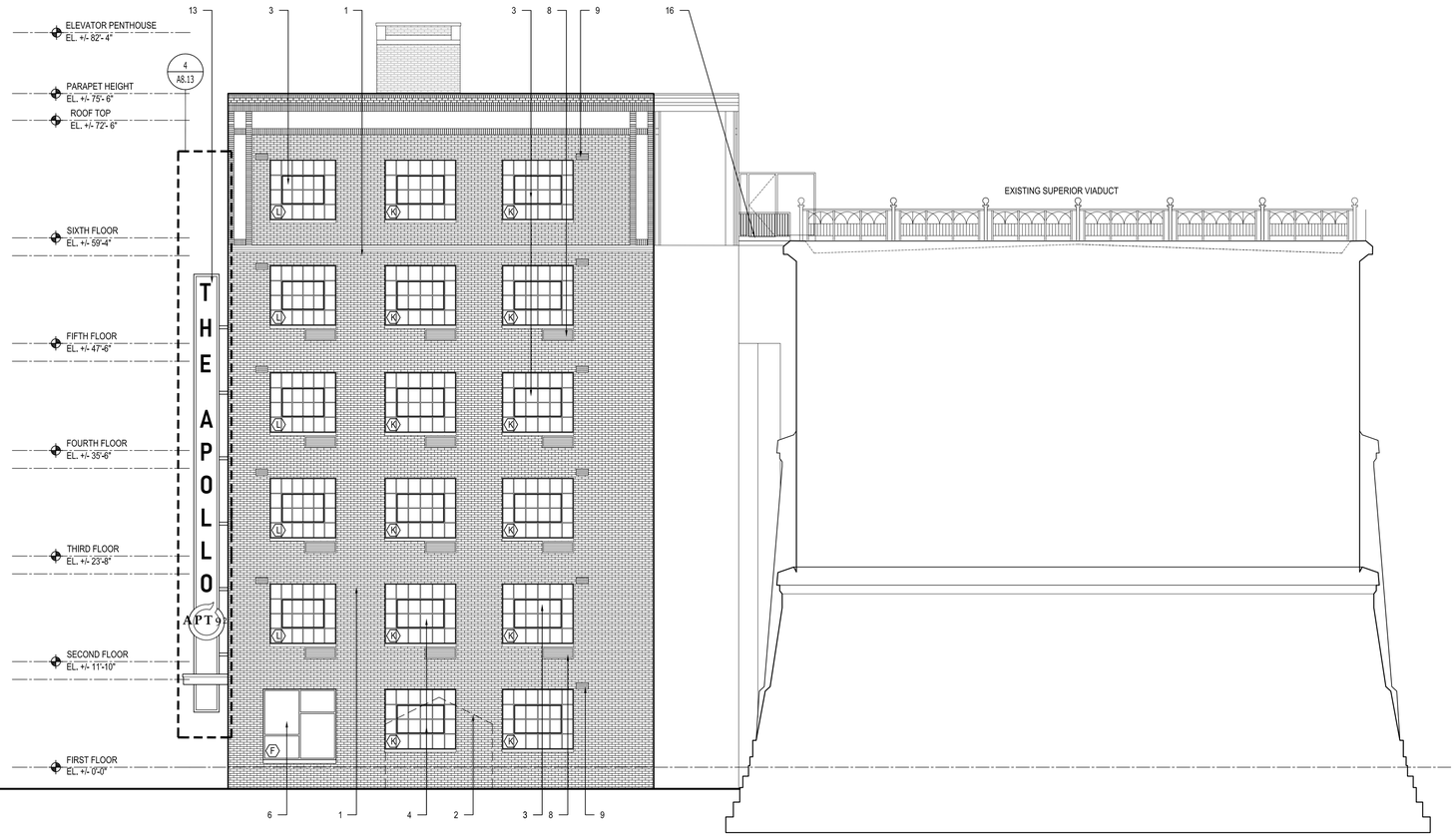



1 A3.10 EAST ELEVATION

SCALE: 1/8" = 1'-0"




2 A3.10 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

## ELEVATION KEYNOTES:

1. CLEAN AND REPAIR EXISTING BRICK MASONRY
2. DEMO EXISTING STRUCTURE
3. REPAIR & REUSE EXISTING STEEL SASH WINDOWS
4. REPLACE NON-MATCHING WINDOWS WITH NEW ALUMINUM WINDOWS IN CONFIGURATIONS SIMILAR TO EXISTING STEEL SASH
5. REMOVE FRONT PANEL OF EXISTING BALCONIES, PAINT AND RE-MOUNT TO WALL
6. NEW ALUMINUM WINDOWS. REPLACE EXISTING INFILLED OPENING. CUT NEW OPENING IF REQUIRED.
7. NEW ALUMINUM ENTRANCE AND STOREFRONT
8. NEW LOUVER OPENING FOR PROPOSED PTAC SYSTEM
9. NEW LOUVER OPENING FOR BATH EXHAUST
10. NEW STEEL DOOR
11. GALVANIZED STEEL STAIR WITH STEEL GUARD
12. GALVANIZED STEEL RAILING
13. NEW BLADE SIGN
14. NEW ENTRANCE CANOPY
15. DOWNSPOUT
16. REPLACE EXISTING PEDESTRIAN BRIDGE TO VIADUCT
17. PTD HM DOOR & FRAME
18. NEW GALVANIZED STEEL SECURITY DOOR

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FAX: 216-752-4301
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## ISSUE

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|---|---|---|
| 1 | 100% SD SET | 08.30.2021 |
| 2 | 100% DD SET | 11.08.2021 |
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## BUILDING ELEVATIONS

SCALE: 1/8" = 1'-0"

| | |
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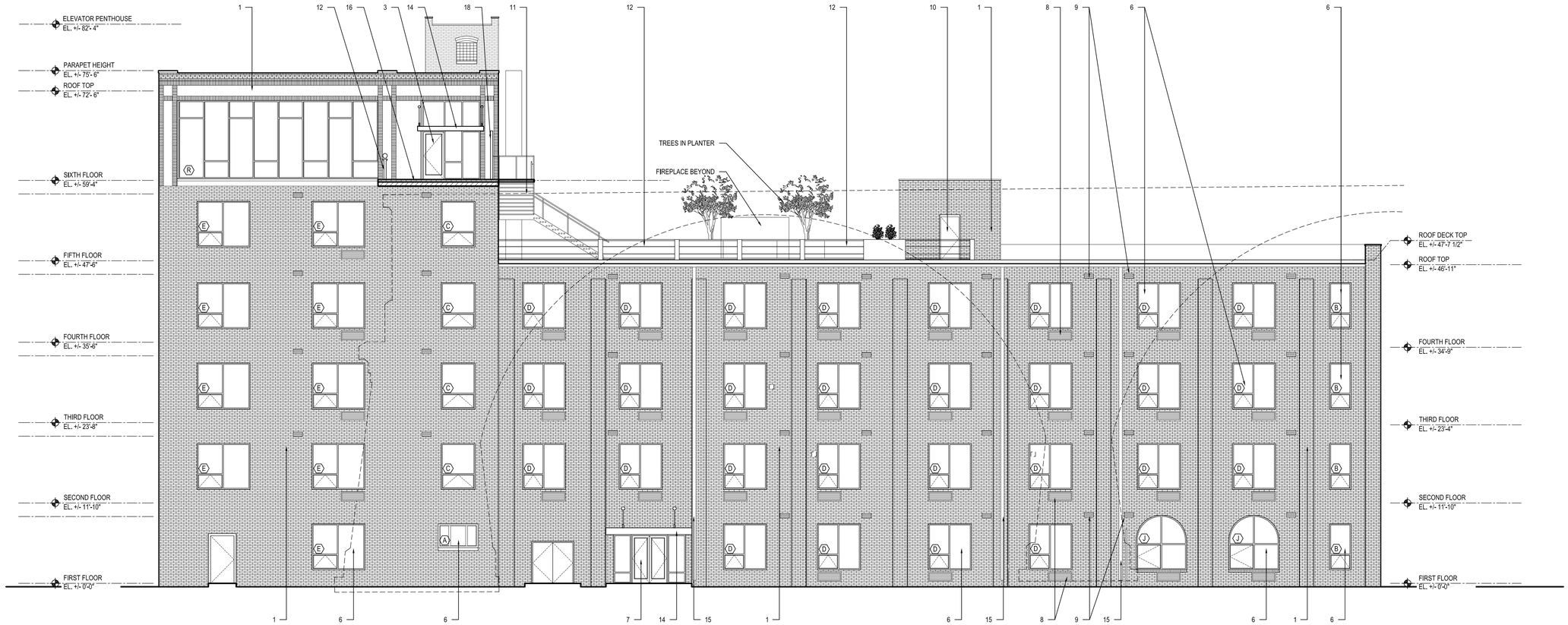
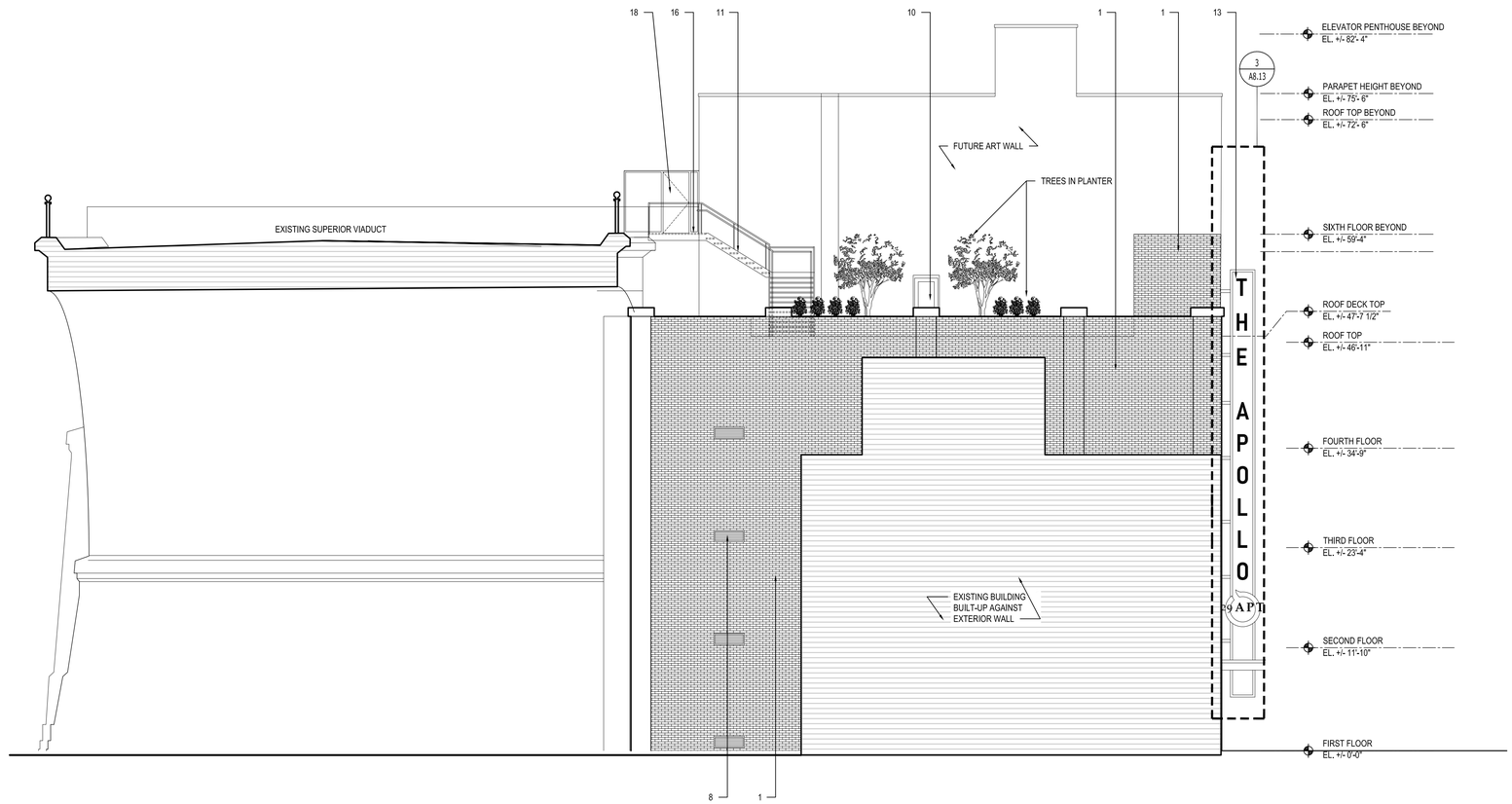



1 A3.11 WEST ELEVATION

SCALE: 1/8" = 1'-0"




2 A3.11 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

## ELEVATION KEYNOTES:

1. CLEAN AND REPAIR EXISTING BRICK MASONRY
2. DEMO EXISTING STRUCTURE
3. REPAIR & REUSE EXISTING STEEL SASH WINDOWS
4. REPLACE NON-MATCHING WINDOWS WITH NEW ALUMINUM WINDOWS IN CONFIGURATIONS SIMILAR TO EXISTING STEEL SASH
5. REMOVE FRONT PANEL OF EXISTING BALCONIES, PAINT AND RE-MOUNT TO WALL
6. NEW ALUMINUM WINDOWS. REPLACE EXISTING INFILLED OPENING. CUT NEW OPENING IF REQUIRED.
7. NEW ALUMINUM ENTRANCE AND STOREFRONT
8. NEW LOUVER OPENING FOR PROPOSED PTAC SYSTEM
9. NEW LOUVER OPENING FOR BATH EXHAUST
10. NEW STEEL DOOR
11. GALVANIZED STEEL STAIR WITH STEEL GUARD
12. GALVANIZED STEEL RAILING
13. NEW BLADE SIGN
14. NEW ENTRANCE CANOPY
15. DOWNSPOUT
16. REPLACE EXISTING PEDESTRIAN BRIDGE TO VIADUCT
17. PTD HM DOOR & FRAME
18. NEW GALVANIZED STEEL SECURITY DOOR

RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
PHONE: 216-752-4300
FAX: 216-752-4301
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## BUILDING ELEVATIONS

SCALE: 1/8" = 1'-0"

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A3.11




# EAST ELEVATION - PROPOSED RENOVATIONS

SCALE: 1" = 16'
0 4' 8' 16'

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16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
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1250 RIVERBED STREET
CLEVELAND, OHIO

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# WEST ELEVATION

SCALE: 1" = 16'
0 4' 8' 16'

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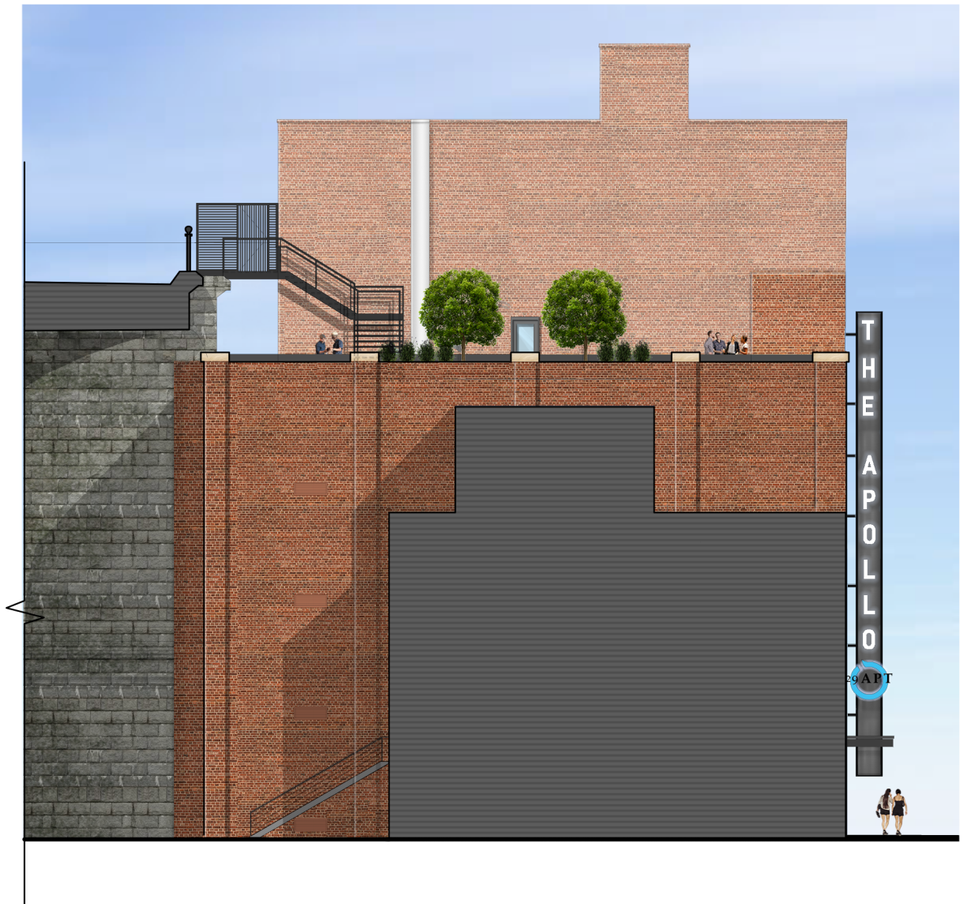
NORTH ELEVATION




SOUTH ELEVATION

# NORTH AND SOUTH ELEVATIONS

SCALE: 1" = 16'
0 4' 8' 16'

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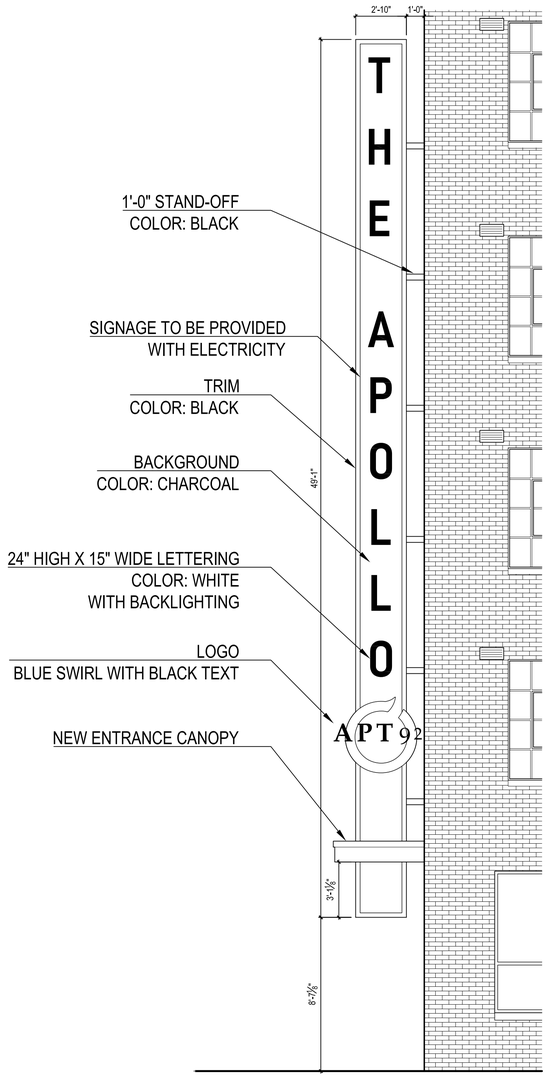
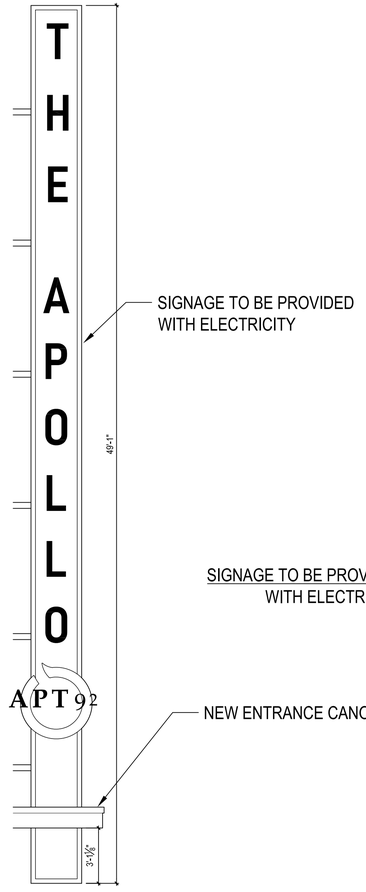
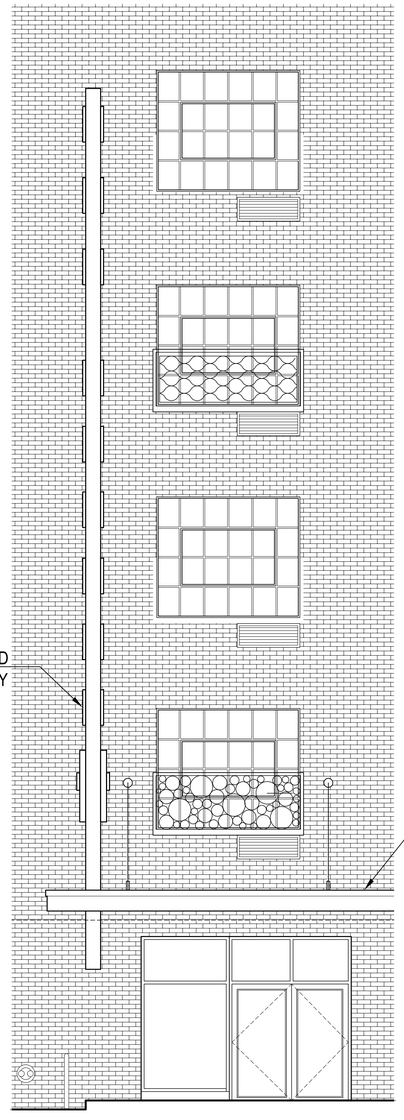


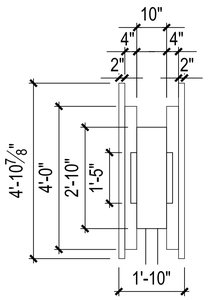

4 A8.13 BUILDING SIGNAGE, RIGTH ELEVATION
SCALE: 1/4" = 1'-0"




3 A8.13 BUILDING SIGNAGE, LEFT ELEVATION
SCALE: 1/4" = 1'-0"




2 A8.13 BUILDING SIGNAGE, FRONT ELEVATION
SCALE: 1/4" = 1'-0"




1 A8.13 BUILDING SIGNAGE, PLAN
SCALE: 1/2" = 1'-0"

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ISSUE

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BUILDING SIGNAGE DETAILS

SCALE: 1/4" = 1'-0"

| | |
|---|---|
| PROJECT # | 21028 |
| DRAWN BY | |
| CHECKED BY | RDL |
| FILE NAME | |
| PLOT DATE | March 9, 2022 |

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A8.13




# A2.32 PHOTOMONTAGE OF PROPOSED BLADE SIGN

RDL ARCHITECTS
RDL ARCHITECTS
16102 Chagrin Blvd. Suite 200
Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

**APOLLO APARTMENTS**
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CLEVELAND, OHIO

July 30, 2021 rdla: #21028 COPYRIGHT © 2021

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# VIADUCT COURTYARD VIEW 1

SCALE: 1" = 16'

0 4' 8' 16'

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# VIADUCT COURTYARD VIEW 2

SCALE: 1" = 16'
0 4' 8' 16'

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# ROOFTOP DECK

SCALE: 1" = 16'
0 4' 8' 16'

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Shaker Heights, Ohio 44120
T: 216-752-4300 F: 216-752-4301
www.rdlarchitects.com

**APOLLO APARTMENTS**
1250 RIVERBED STREET
CLEVELAND, OHIO

APT 92 The Apollo
APT DEVELOPMENT GROUP
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# INTERIORS - APARTMENT VIEWS

SCALE: 1" = 16'
0 4' 8' 16'

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Shaker Heights, Ohio 44120
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# INTERIORS - OFFICES VIEWS

SCALE: 1" = 16'
0 4' 8' 16'

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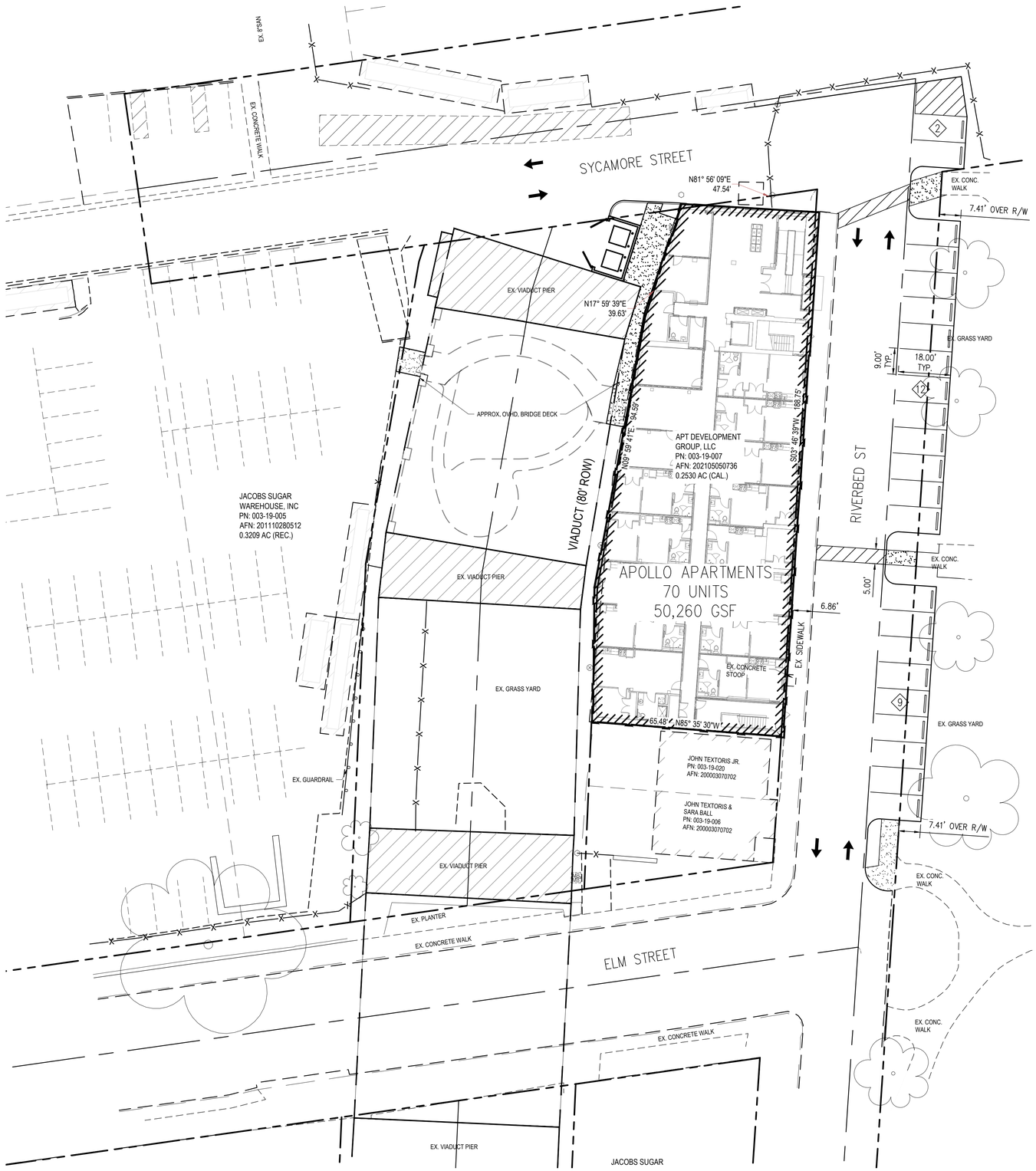


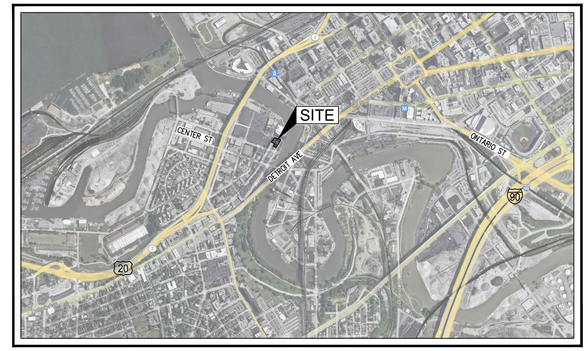


VICINITY MAP

NOT TO SCALE

## ENGINEER

THE MANNIK & SMITH GROUP, INC.
1160 DUBLIN ROAD, SUITE 100
COLUMBUS, OHIO 43215
CONTACT: STEPHEN C. HERMILLER
PHONE: 614-441-4222
EMAIL: SHERMILLER@MANNIKSMITHGROUP.COM

## ARCHITECT

RDL ARCHITECTS
1602 CHAGRIN BLVD, SUITE 200
SHAKER HEIGHTS, OHIO
CONTACT: RON TANNENBAUM
PHONE: 216-752-4300 X163
EMAIL: RONT@RDLARCHITECTS.COM

## DEVELOPER

APT DEVELOPMENT GROUP, LLC.
5804 HERMAN AVE.
CLEVELAND OHIO, 44102
CONTACT: MICHAEL APT
PHONE: 214-908-0546
EMAIL: MIKE@APT92.COM

## PROJECT DESCRIPTION

UPDATING EXISTING BUILDING TO SERVE AS RESIDENTIAL APARTMENT USE ON RIVERBED STREET. INCLUDES ROADWAY IMPROVEMENTS FOR 2-WAY ACCESS WITH STREET PARKING AND COURTYARD IMPROVEMENTS BENEATH ADJACENT VIADUCT.

## SITE DATA

| | |
|---|---|
| ADDRESS: | 1250 RIVERBED STREET, CLEVELAND, OHIO |
| PID: | 00319007 |
| PROPERTY ZONING: | LLR – LIMITED RETAIL BUSINESS WITH URBAN FORM OVERLAY<br>CLEVELAND CENTRE NATIONAL HISTORIC DISTRICT LISTED CONTRIBUTING STRUCTURE |
| ADJACENT ZONING: | LLR – LIMITED RETAIL BUSINESS WITH URBAN FORM OVERLAY |
| BUILDING INFORMATION: | 70 UNITS APARTMENT COMPLEX – 11,379 SF FOOTPRINT |
| MAXIMUM BUILDING HEIGHT: | 250' (HEIGHT DISTRICT 5) |
| MINIMUM PARKING REQUIRED: | 18 SPACES |
| PARKING PROVIDED: | 23 SPACES |

0 10 20 40

SCALE: 1 IN = 20 FT

| NO. | DATE | BY | DESCRIPTION |
|---|---|---|---|

PRELIMINARY
NOT FOR CONSTRUCTION

237 NORTH MAIN STREET
ADRIAN, MI 49221
TEL: 517.263.4515

PROJECT DATE: 3/16/2022
PROJECT NO: A4680002
DRAWN BY: NAF
CHECKED BY: MDL

Mannik Smith GROUP
TECHNICAL SKILL. CREATIVE SPIRIT.
www.MannikSmithGroup.com

PREPARED FOR:
APT DEVELOPMENT GROUP, LLC
5804 HERMAN AVE.
CLEVELAND, OHIO 44102

DESIGN DEVELOPMENT PLANS FOR
APOLLO APARTMENTS
1250 RIVERBED ST, CLEVELAND AVE. 44113

SITE PLAN



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EXISTING ASPHALT PARKING LOT

RIVER ROCK PLANTING BED
BLACK ALUMINUM FENCE
PIERS
(5) TM HI
(3) FM MA
(1) HA NC
BLACK ALUMINUM FENCE
(4) TM HI
ENTRY GATE/DOOR
(1) HA NC
(8) LI MU
BLACK ALUMINUM FENCE
(1) AM LA
(1) AM LA
(7) IV SP
(15) LI MU
(18) AN RR
GATHERING AREA WITH FIRE PIT
CURVED LOUNGE SEATING/BENCH
ARTIFICAL LAWN AREA
TABLES WITH OVERHEAD LIGHTING
OVERHEAD TIVOLI LIGHTING
RAISED LAWN WITH 2' TALL SEAT WALL
8' WIDE MAIN ENTRY PATH
DUMPSTER LOCATION
LIGHT POLES TO ILLUMINATE MAIN ENTRY PATH
GRAVEL PATH IN SCULPTURE GARDEN
ARTIFICAL LAWN AREA
ARTIFICAL LAWN AREA
DOOR CANOPY
VIADUCT (80' ROW)
RIVER ROCK PLANTING BED
(9) BS IW
N17° 59' 39"E
39.63'
N09° 59' 41"E 94.59'

0 2.5 5 10
1 INCH = 5 FEET

LEGEND

- PR DECIDUOUS FLOWERING TREE
- PR DECIDUOUS FLOWERING SHRUB
- PR EVERGREEN SHRUB
- PR ORNAMENTAL GRASS/PERENNIAL
- CONCRETE SIDEWALK
- BRICK PAVERS
- GRAVEL WALK
- ARTIFICIAL TURF
- RIVER ROCK PLANTING BED

| NO. | DATE | BY | DESCRIPTION |
|---|---|---|---|
| | | | PRELIMINARY NOT FOR CONSTRUCTION |

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ADRIAN, MI 49221
TEL: 517.263.4515

PROJECT DATE: 3/16/2022
PROJECT NO: A4680002
DRAWN BY: NAF
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PREPARED FOR:
APT DEVELOPMENT GROUP, LLC
580H HERMAN AVE.
CLEVELAND, OHIO 44102

DESIGN DEVELOPMENT PLANS FOR
APOLLO APARTMENTS
1250 RIVERBED ST, CLEVELAND AVE. 44113

COURTYARD LANDSCAPE AND PAVING PLAN

2 / 3

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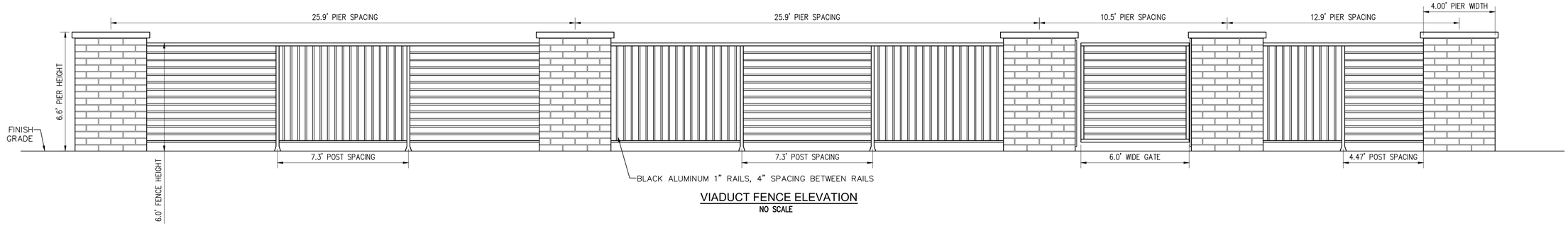



VIADUCT FENCE ELEVATION

NO SCALE

## LANDSCAPE PLANTING NOTES

1. THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL PLANTS AND VEGETATION PROPOSED ON THE LANDSCAPING PLAN. ANY TREES, SHRUBS, GROUND COVER OR OTHER VEGETATION PLANTED AS PART OF THIS PROJECT THAT DO NOT SURVIVE ONE YEAR FROM PLANTING SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PERTINENT UTILITY COMPANIES THREE WORKING DAYS IN ADVANCE OF ANY DIGGING. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF ANY UTILITIES.

3. REFER TO THE LANDSCAPE PLAN FOR ADDITIONAL NOTES. LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF ODOT CONSTRUCTION SPECIFICATIONS.

4. ALL PLANTING MATERIALS: SHALL BE PLANTED PER ODOT SPECIFICATIONS. EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE BROKEN, LOW HANGING AND OTHER UNDESIRABLE GROWTH TO ENSURE HEALTHY AND SYMMETRICAL NEW GROWTH.

5. PLANTING BEDS. ONE MONTH BEFORE CULTIVATION AND AFTER DAYTIME TEMPERATURES HAVE WARMED TO 60° CONSISTENTLY, TREAT ALL PLANTING BEDS THAT ARE TO BE DEVELOPED IN AREAS OF EXISTING TURF WITH PRE-EMERGENT AND POST-EMERGENT TYPE HERBICIDES. USE A STATE-LICENSED PESTICIDE APPLICATOR TO APPLY THE HERBICIDE. REPEAT HERBICIDE APPLICATION TWO WEEKS LATER AND UNTIL ALL HERBACEOUS MATERIALS HAVE BEEN KILLED. BEFORE PLANTING. TOP DRESS ALL PLANTING BEDS WITH A MINIMUM OF 6 INCHES OF BACKFILL MIX, THEN CULTIVATE PLANTING AREA TO A DEPTH OF 6 INCHES USING A PLOW, DISC, OR ROTO-TILLER.

6. BACKFILL MIX. FOR ALL PLANTINGS, USE BACKFILL MIX CONSISTING OF THE FOLLOWING:
A. ONE PART EXCAVATED SOIL.
B. ONE PART TOPSOIL.
C. ONE PART EPA RATED CLASS IV COMPOST.
D. A SLOW RELEASE COMMERCIAL FERTILIZER (0-20-20 OR EQUAL) ADDED AT A RATE OF 5 POUNDS PER CUBIC YARD TO THE BACKFILL MIX.
E. IF SOIL AREAS ARE OF HIGH PH (GREATER THAN 6.5), APPLY 1.25 POUNDS OF ELEMENTAL SULFUR PER CUBIC YARD OF BACKFILL MIX.
NOTE: CONTRACTOR SHALL SUPPLY A DETAILED SOIL ANALYSIS PRIOR TO ALL PLANT BED PREPARATION. ANALYSIS SHALL INDICATE SOIL PH, TEXTURE, MAJOR NUTRIENTS, SALTS, ETC. SOIL ANALYSIS SHALL BE FROM A REPUTABLE, INDEPENDENT LAB. SOIL AMENDMENTS SHALL BE INCORPORATED INTO BACKFILL/PLANT MIX AS RECOMMENDED BY THE INDEPENDENT LAB.

7. MULCH. SMOOTH AND SHAPE THE BACKFILL MIX TO FORM A SHALLOW BASIN SLIGHTLY LARGER THAN THE PLANTING HOLE. MULCH ALL PLANTING AREAS WITH A LAYER OF FINELY SHREDDED HARDWOOD BARK OF UNIFORM TEXTURE & SIZE. PLANTS GROUPED IN MASSES SHALL HAVE THE ENTIRE CONTIGUOUS PLANTING BED OR ISLAND MULCHED. USE SHREDDED HARDWOOD BARK AGED MIN. ONE YEAR. RAKE AND SMOOTH THE ENTIRE AREA OF THE PLANTING BEDS, MULCH TO A DEPTH OF 3 INCHES. AFTER MULCHING AND BEFORE WATERING, ADD A SLOW RELEASE COMMERCIAL FERTILIZER (12-12-12 OR EQUAL), IN GRANULAR FORM, TO THE TOP OF THE MULCH AT A RATE OF 5 POUNDS PER 1000 SQUARE FEET. DO NOT ALLOW FERTILIZER TO CONTACT THE STEMS, BRANCHES, ROOTS OR LEAVES.

8. PERIOD OF ESTABLISHMENT. BEFORE FINAL INSPECTION, PLACE ALL PLANTS AND CARE FOR THEM FOR A PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT BEGINS IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATIONS AND CONTINUES UNTIL OCTOBER 1. THE MINIMUM PERIOD OF ESTABLISHMENT IS ONE GROWING SEASON, JUNE 1 THROUGH OCTOBER 1. DURING THE PERIOD OF ESTABLISHMENT, FOLLOW STANDARD HORTICULTURAL PRACTICES TO ENSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. WATER, REMULCH, RESTAKE, GUY, AND CULTIVATE AS NECESSARY. PERFORM AT LEAST TWO WEEDING AND MOWING PROGRAMS (AROUND TREES, GUY STAKES, SHRUBS, AND BED EDGES) OF SUCH INTENSITY AS TO COMPLETELY RID THE PLANTED AND MULCHED AREAS OF WEEDS AND GRASSES. BEGIN THE FIRST PROGRAM ON OR ABOUT JUNE 15 AND THE SECOND APPROXIMATELY 8 WEEKS LATER. ON OR ABOUT AUGUST 15, THE ENGINEER WILL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LIST OF MISSING AND DEAD PLANTS AND THOSE THAT HAVE DIED BACK BEYOND NORMAL PRUNING LINES. REPLANT AS REQUIRED ACCORDING TO THE SPECIFICATIONS OF THE ORIGINAL MATERIAL. REPLACEMENT PLANTS ARE SUBJECT TO A NEW PERIOD OF ESTABLISHMENT. IMMEDIATELY REPLACE PLANTS PLANTED INITIALLY IN THE FALL THAT HAVE DIED BEFORE THE SPRING PLANTING SEASON. CARE FOR THE REPLACEMENT PLANTS DURING THE NEW ESTABLISHMENT PERIOD.

9. RESTORATION OF DISTURBED AREAS FOR NEW LAWN:
ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR LANDSCAPE PLANTING BEDS SHALL BE SHALL BE PREPARED FOR GRASS SEED AND SEEDED. LOOSEN RUTS AND WORK THE SOIL AREAS TO A MINIMUM OF 6" DEEP PRIOR TO FINE GRADING AND SEEDING WORK. AREAS TO RECEIVE GRASS SEED SHALL HAVE A MIN. 4" TOPSOIL PLACED, SEEDED AND A STRAW/MULCH BLANKET COVER PLACED OVER THE SEEDED AREAS PER ODOT SPECIFICATIONS. FERTILIZE WITH ONE POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET WITH A SLOW RELEASE COMMERCIAL STARTER FERTILIZER (LESCO 18-24-12 OR EQUAL).

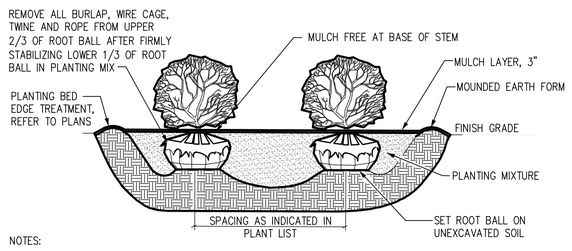
10. LANDSCAPE TREES, SHRUBS AND PERENNIAL WATERING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, DELIVERING, APPLYING, MEASURING AND SCHEDULING A SUFFICIENT AMOUNT OF WATER NECESSARY TO KEEP EACH PLANT IN A HEALTHY GROWING CONDITION THROUGHOUT THE PERIOD OF ESTABLISHMENT. THE CONTRACTOR SHALL APPLY 1" OF WATER PER WEEK TO ALL NEW PLANTS. THE CONTRACTOR SHALL INSTALL & MAINTAIN SUPPLEMENTAL DRIP WATERING TREE BAGS (SUCH AS 20 GALLON TREE GATOR WATER BAG) TO PROVIDE ADEQUATE, SLOW RELEASE OF WATER. WATER BAGS SHALL BE REMOVED AT THE END OF THE SECOND GROWING SEASON.

11. TURF GROUNDCOVER (SODDING, SEEDING AND SEED MULCHING):
ALL SEEDING INSTALLATION SHALL CONFORM TO ODOT SPECIFICATIONS AND NOTE 9 ABOVE. SEED AT 6 LBS/1000 SF WITH THE FOLLOWING SEED MIXTURE (ODOT LAWN BLEND):

| | |
|---|---|
| KENTUCKY 31 TALL FESCUE | 40% |
| PERENNIAL RYE | 30% |
| KENTUCKY BLUEGRASS | 30% |

## LANDSCAPE PLANT LIST

| ABRV. | QUANTITY | SCIENTIFIC NAME | COMMON NAME | SIZE | REMARKS | TYPE |
|---|---|---|---|---|---|---|
| AM LA | 2 | AMELANCHIER LAEVIS 'LUSTRE' | LUSTRE ALLEGHENY SERVICEBERRY | 2" CALIPER | B&B | ORNAMENTAL TREE |
| AN RR | 18 | ATHYRIUM NIPONICUM 'REGAL RED' | REGAL RED JAPANESE PAINTED FERN | 1 GALLON | CONTAINER | PERENNIAL |
| BS IW | 9 | BUXUS SINICA CAR. INSULARIS 'WINTERGREEN' | WINTERGREEN BOXWOOD | 5 GALLON | CONTAINER | EVERGREEN SHRUB |
| FM MA | 3 | FOTHERGILLA MAJOR 'MT. AIRY' | MT. AIRY FOTHERGILLA | 5 GALLON | CONTAINER | DECIDUOUS SHRUB |
| HA NC | 2 | HYDRANGEA MACROPHYLLA 'PIIHM-II' | ENDLESS SUMMER BLOOMSTRUCK HYDRANGEA | 5 GALLON | CONTAINER | DECIDUOUS SHRUB |
| IV SP | 7 | ITEA VIRGINICA 'SPRICH' | LITTLE HENRY DWARF VIRGINIA SWEETSPIRE | 3 GALLON | CONTAINER | DECIDUOUS SHRUB |
| LI MU | 23 | LIRIOPE MUSCARI 'BIG BLUE' | BIG BLUE LIRIOPE | 1 GALLON | CONTAINER | ORNAMENTAL GRASS |
| TM HI | 9 | TAXUS X MEDIA 'HICKSII' | HICKS YEW | 3 GALLON | CONTAINER | EVERGREEN SHRUB |



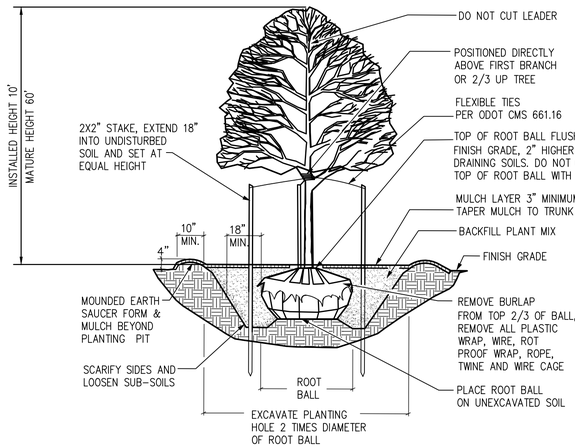

NOTES:

ALL SHRUBS PLANTED IN ROWS OR MASSES SHALL BE MATCHED IN SIZE AND FORM.

SHRUBS SHALL BEAR SAME RELATION TO FINISH GRADE AS THEY BORE TO EXISTING GRADE IN THE PREVIOUSLY PLANTED CONDITION.

MASS SHRUB PLANTING DETAIL (B&B OR CONTAINER)

NO SCALE




DECIDUOUS TREE PLANTING DETAIL

NO SCALE

| NO. | DATE | BY | DESCRIPTION |
|---|---|---|---|
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237 NORTH MAIN STREET
ADRIAN, MI 49221
TEL: 517.263.4515

PROJECT DATE: 3/16/2022
PROJECT NO: A4680002
DRAWN BY: NAF
CHECKED BY: MDL

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PREPARED FOR:
APT DEVELOPMENT GROUP, LLC
5804 HERMAN AVE.
CLEVELAND, OHIO 44102

DESIGN DEVELOPMENT PLANS FOR
APOLLO APARTMENTS
1250 RIVERBED ST. CLEVELAND AVE. 44113

LANDSCAPE NOTES AND DETAILS

3 / 3

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# Apollo Apartments

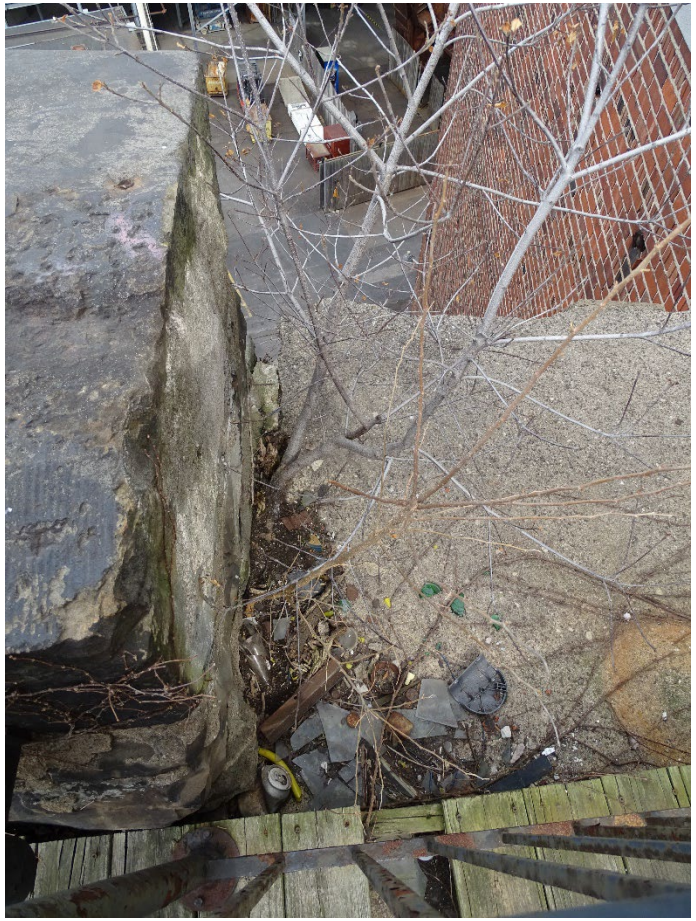
1250 Riverbed Street

Impacts on Superior Viaduct

Staff Introduction







# Cleveland Landmarks Commission

## Concept Plan

March 24, 2022

# Concept Plan

March 24, 2022

**Case 22-030**: Norma Herr Women's Center
(Former Amalgamated Clothing Workers of America)
**2227 Payne Avenue**
Lobby Renovation and Elevator Addition
Ward 7: Howse
Project Representatives: Brian Grambort, Hiti DiFrancesco + Siebold Architects

**Presentation to:**

# Cleveland Downtown Flats Design Review

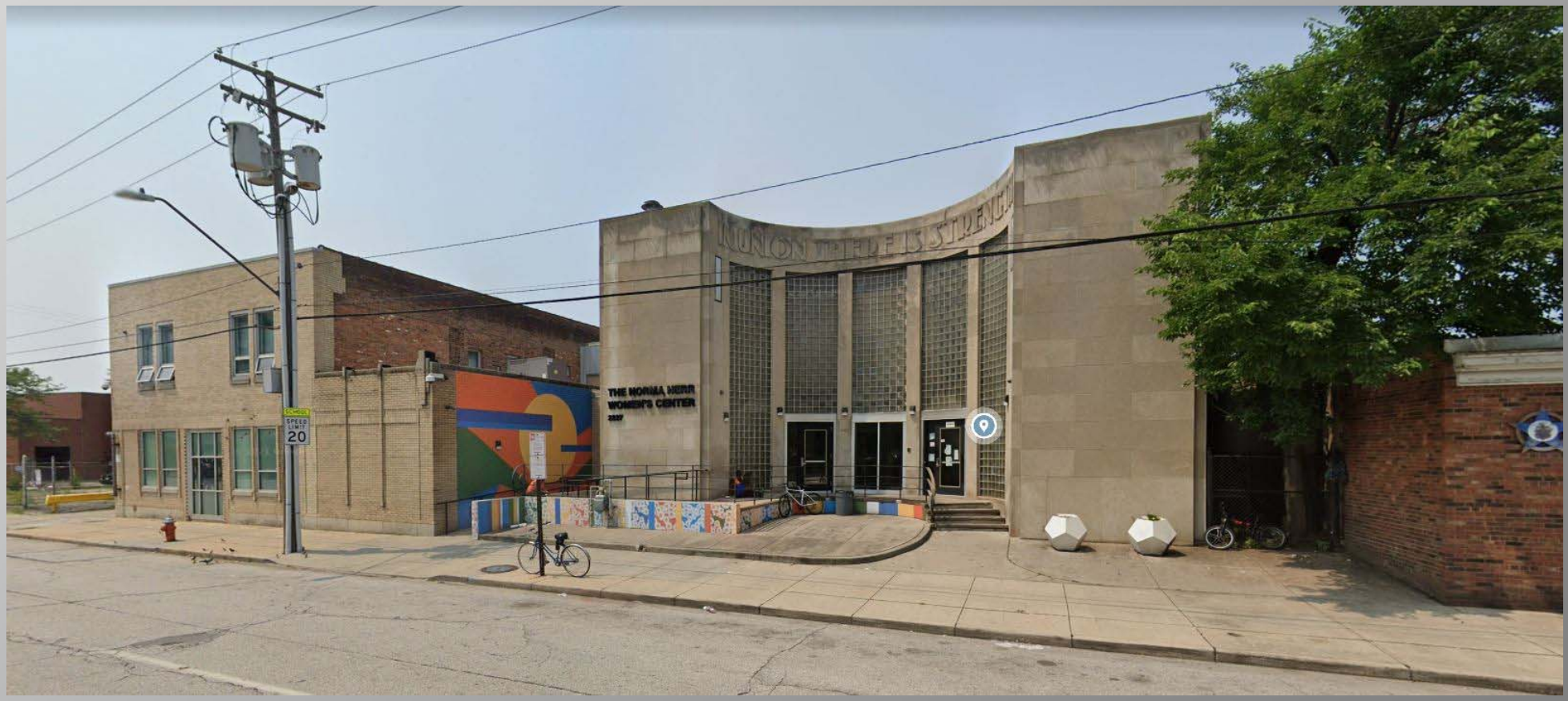
March 17, 2022

# Norma Herr Women's Center

## Lobby Renovation and Elevator Addition

## 2227 Payne Avenue

hd+s
HITI
DIFRANCESCO
+SIEBOLD




**2227 Payne Avenue**

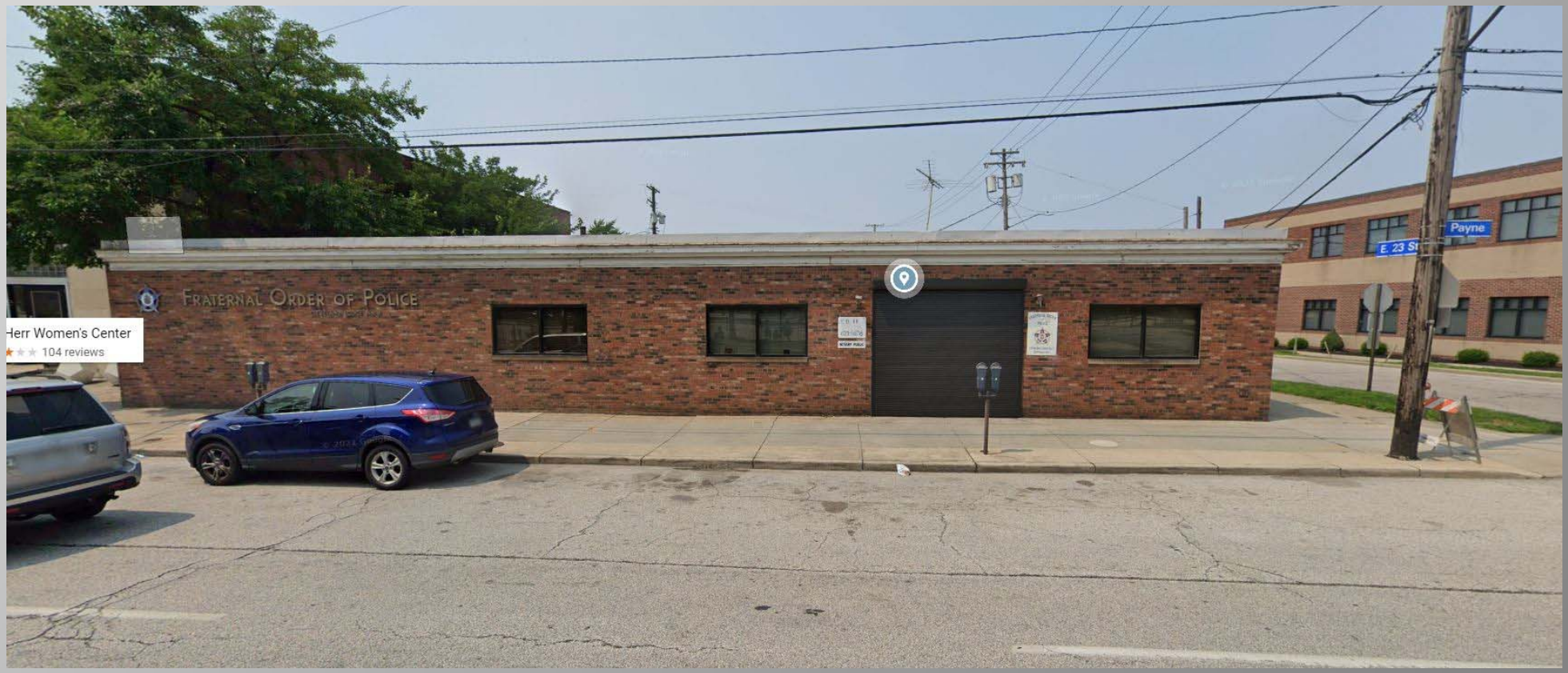
*Hiti, DiFrancesco and Siebold, Inc.*




*Hiti, DiFrancesco and Siebold, Inc.*

# History of Norma Herr

- **1949**: Construction completed on Sidney Hillman Memorial Building
- **2004-current**: Building houses the Women's Center.
  - Emergency shelter for homeless women




VIEW OF 2249 PAYNE AVE. FRATERNAL ORDER OF POLICE

## CONTEXT VIEWS




VIEW OF 2301 PAYNE AVENUE  CLEVELAND POLICE CREDIT UNION

## CONTEXT VIEWS




VIEW OF 2209 PARKING LOT

## CONTEXT VIEWS



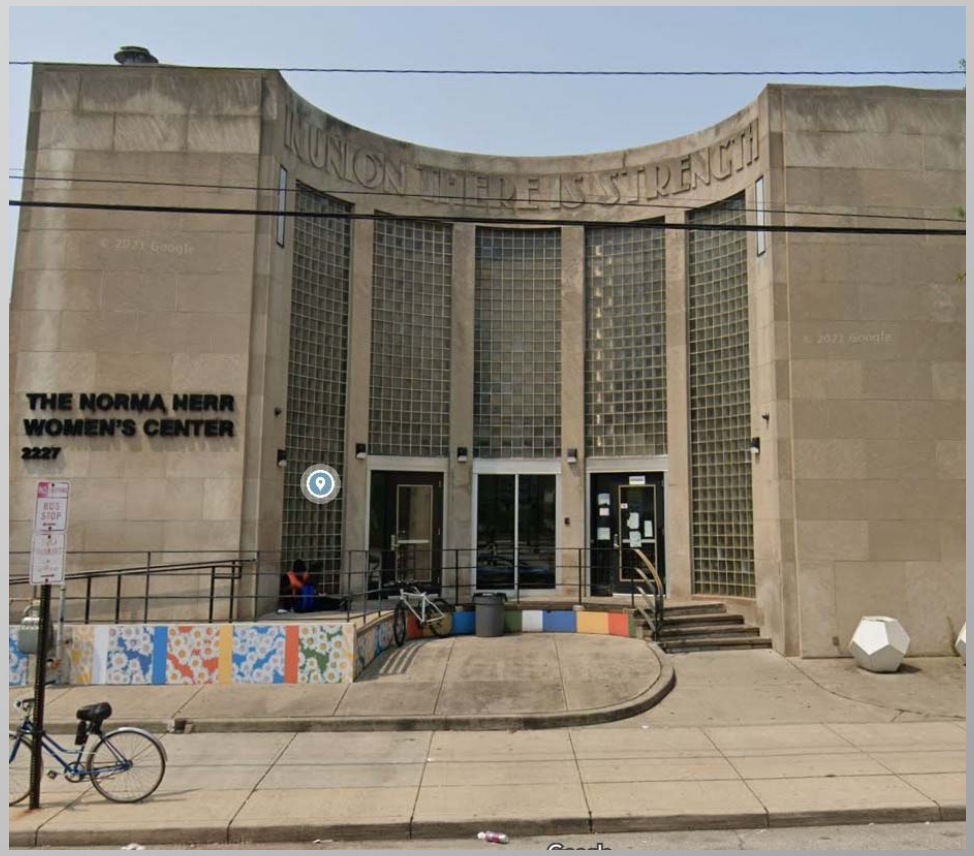

VIEW OF CAMPUS INTERNATIONAL SCHOOL

## CONTEXT VIEWS




VIEW OF CAMPUS PARKING LOTS

## CONTEXT VIEWS




EXISTING FRONT ELEVATION




HISTORIC BUILDING FRONT ELEVATION




FRONT ELEVATION POST 2009 RENOVATION

# Norma Herr Women's Center

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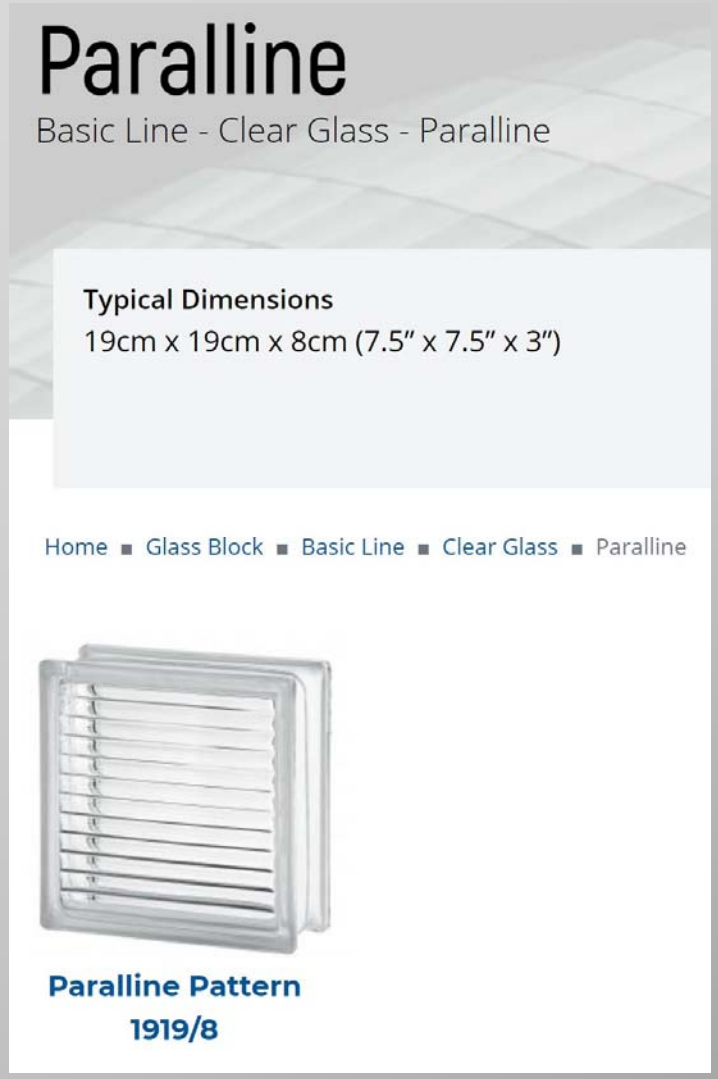



PROPOSED GLASS BLOCK



EXISTING GLASS BLOCK – EXTERIOR VIEW
QUARTER TURN INSTALLATION



EXISTING GLASS BLOCK – INTERIOR VIEW
QUARTER TURN INSTALLATION

**Norma Herr Women's Center**

*Hiti, DiFrancesco and Siebold, Inc.*



HISTORIC ENTRY OPENINGS




EXISTING ENTRY OPENINGS

**Norma Herr Women's Center**

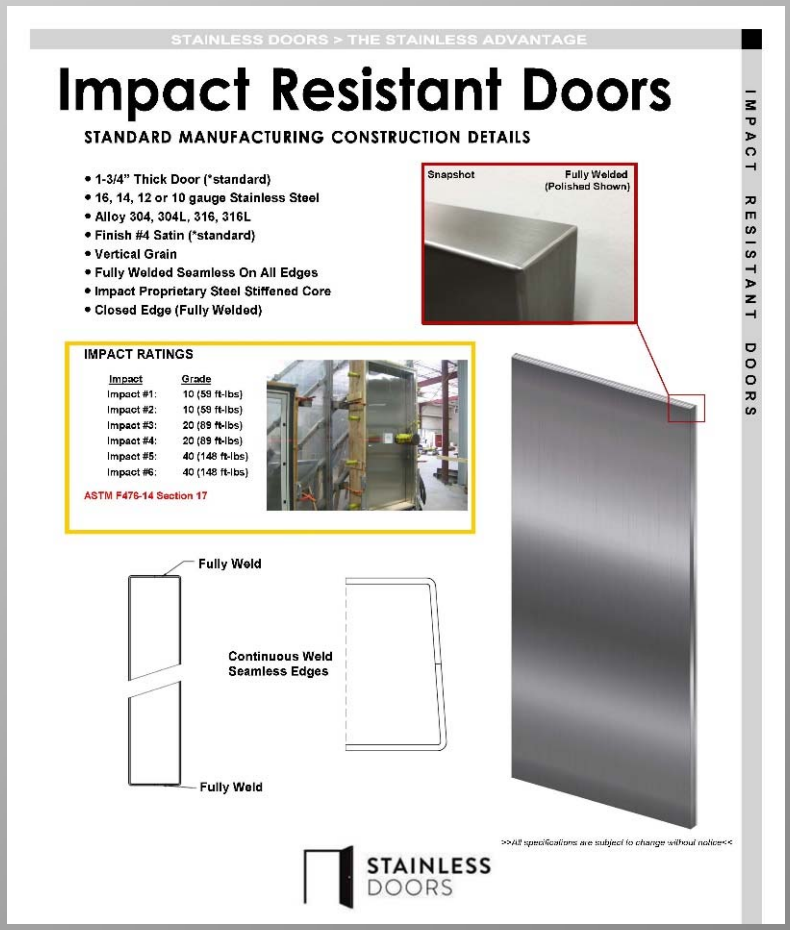
*Hiti, DiFrancesco and Siebold, Inc.*




EXISTING ENTRANCE



Champagne




# Colored Stainless

Colored Stainless steel is available in a wide range of colors. These are the more common colors used in the architectural building industry. Through partnerships with quality stainless steel sheet metal manufac-tures, Stainless Doors offers architects and designers the luxury of selecting a color that best suits there design criteria. For additional options please contact the factory.

PROPOSED DOORS AND FRAMES

## Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*



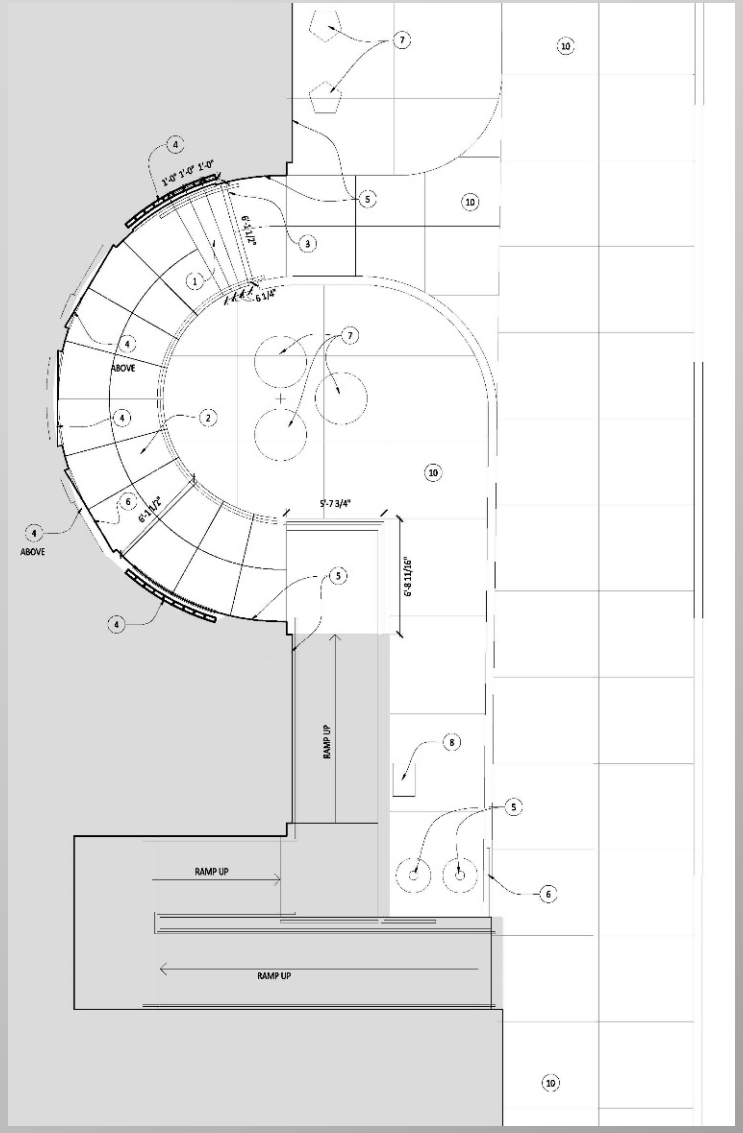
EXISTING WALL SCONCES




PROPOSED WALL SCONCE BRONZE FINISH

**Norma Herr Women's Center**

*Hiti, DiFrancesco and Siebold, Inc.*




ENTRANCE SITE PLAN



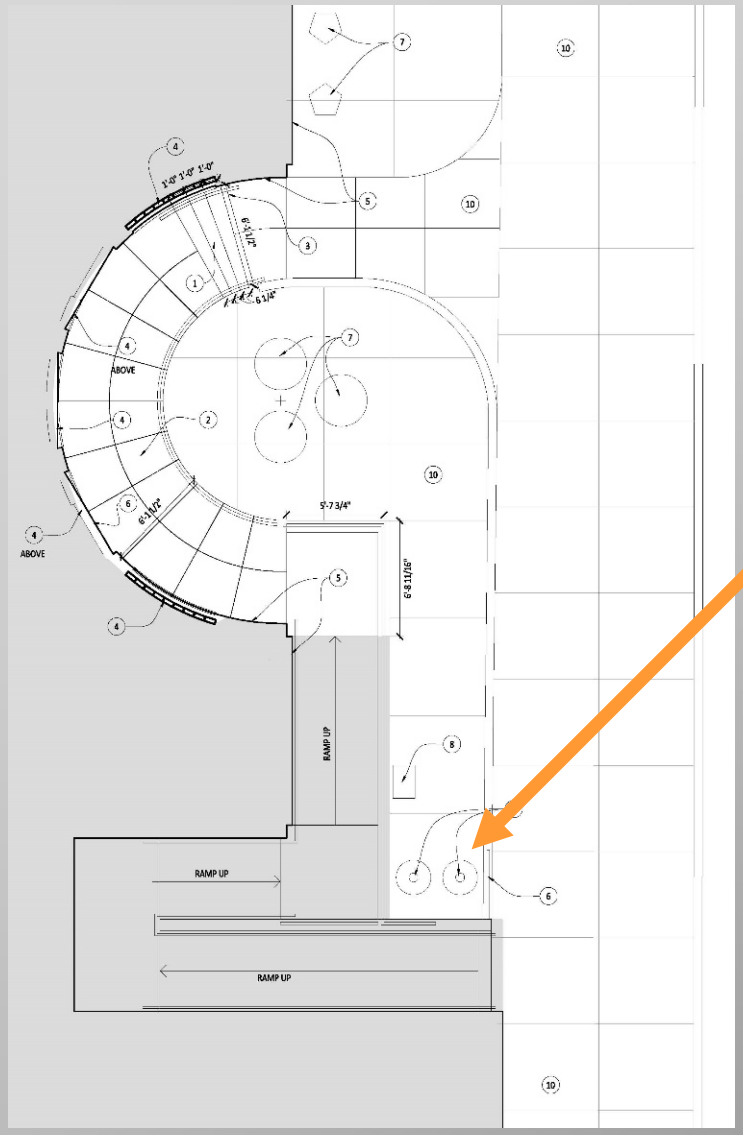
EXISTING ENTRY WALK



EXISTING ENTRY STAIRS

# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*



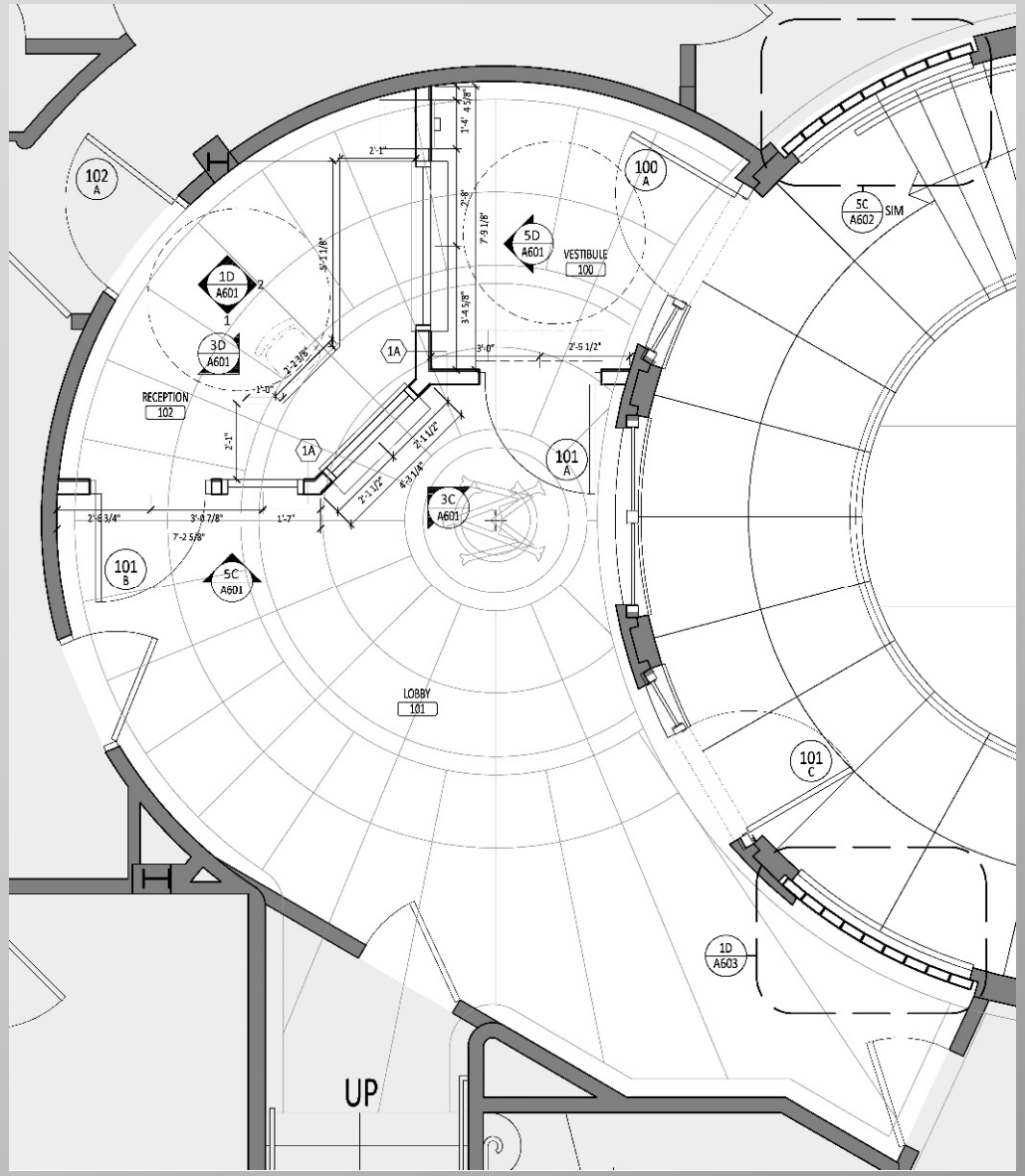

ENTRANCE SITE PLAN



TRASH RECEPTACLES

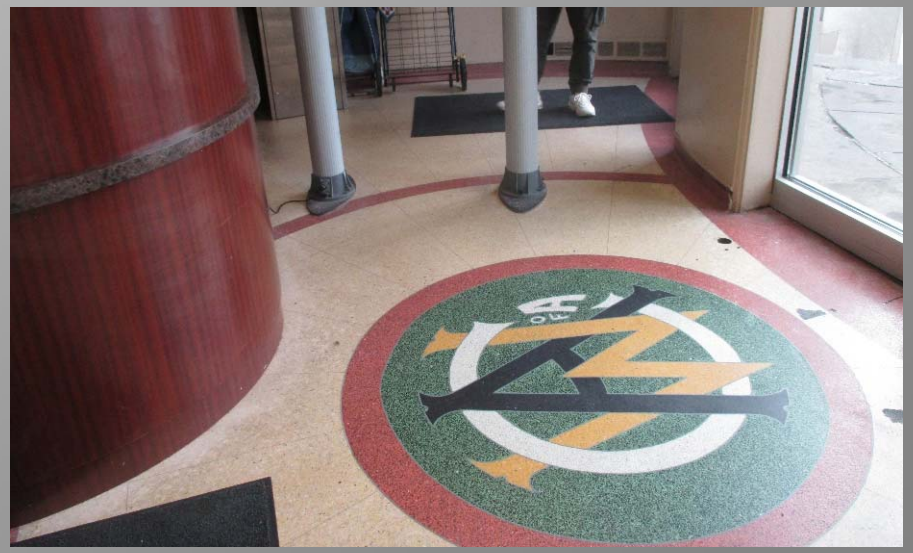
# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*




ENTRANCE LOBBY PLAN





EXISTING LOBBY

# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*



NEW ELEVATOR PLAN



VIEW OF REAR COURTYARD



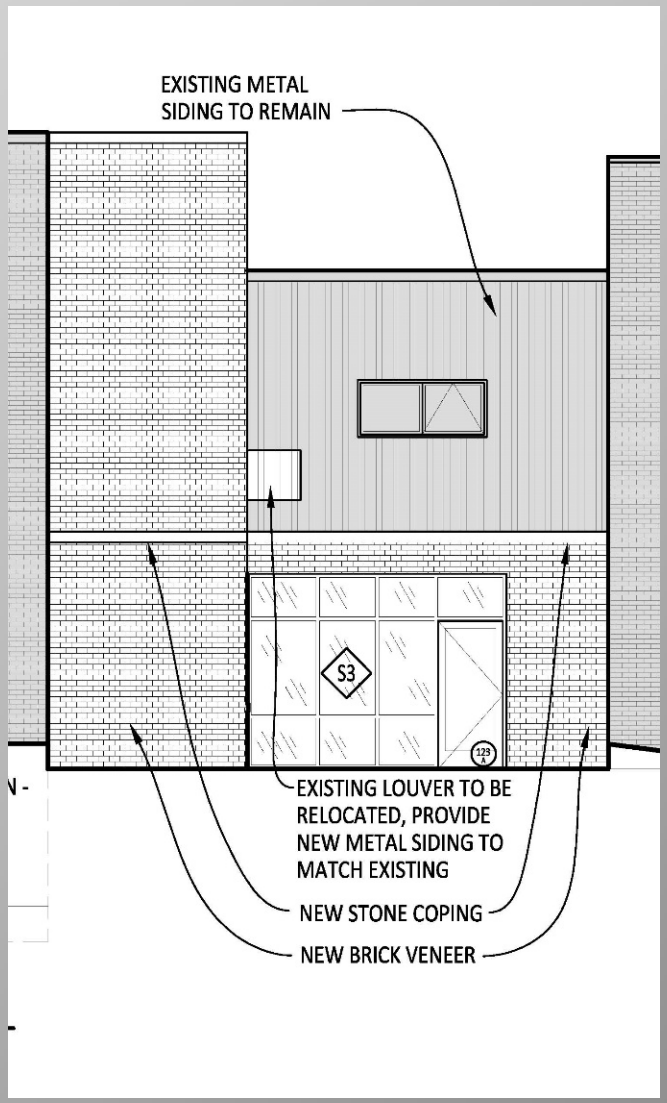

EXISTING FIRST FLOOR PLAN

# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*



VIEW INSIDE COURTYARD




PROPOSED ELEVATOR ELEVATION



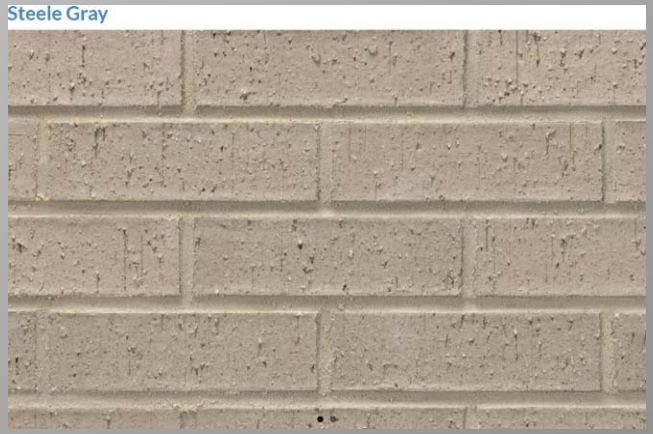
VIEW INSIDE COURTYARD

# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*



VIEW INSIDE COURTYARD




PROPOSED BRICK
ACME MODULAR VELOUR
STEELE GRAY - 106391



VIEW INSIDE COURTYARD

# Norma Herr Women's Center

*Hiti, DiFrancesco and Siebold, Inc.*

**Presentation to:**

# Cleveland Downtown Flats Design Review

March 17, 2022

# Norma Herr Women's Center

## Lobby Renovation and Elevator Addition

## 2227 Payne Avenue

hd+s
HITI
DIFRANCESCO
+SIEBOLD

# Cleveland Landmarks Commission

## Design Review

March 24, 2022

City of Cleveland
Justin M. Bibb, Mayor
City Planning Commission
Joyce Pan Huang, Director
601 Lakeside Avenue, Room 501, Cleveland, OH. 44114
T: (216) 664-2210 F: (216) 664-3281 I www.planning.city.cleveland.oh.us

# Downtown | Flats Design Review Advisory Committee
# Meeting Motion and Report Form

Meeting Location: Virtual, 9:00 AM

**Case Number:** DF2022-014
**Meeting Date:** 3-17-2022
**Project Name:** Norma Herr Renovation
**Ward #:** 3
**Project Address:** 2227 Payne Ave
**Project Rep. :** Brian Grambort, hd+s
**Existing Use:**
**Proposed Use:** Same
**Project Scope:** Renovations to historic Norma Herr building

---

**Design Review Level Applied For:** Final

**Motion by Design Review Committee:** Conceptual

Approve *(as presented)* ○ Approve *(with stated conditions)* ◉ *Disapprove* ○ *Table* ○

Conditions:

Provide better rendered front elevation
Consistent metals on front of building
More consistent lines in delineation of styles, rails and frames
Symmetry of front facade

---

**Committee Action:** (1 = First; 2 = Second; R = Recusal Yea = Yes; Nay = No; Abst. = Abstain; Pres. = Present)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Bialosky | (C) | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. | Schwartzberg | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. |
| Bogart | | ■ Yea | ☐ Nay | ☐ Abst. | ☐ Pres. | Soltis | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. |
| Boyd | | ☐ Yea | ☐ Nay | ☐ Abst. | ☐ Pres. | VanderWiel | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. |
| Brown | | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. | Yablonsky | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. |
| Geist | (VC) | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. | Zarfoss | ☐ Yea | ☐ Nay | ☐ Abst. | ☐ Pres. |
| Pesarchick | | ■ Yea | ☐ Nay | ☐ Abst. | ■ Pres. | | | | | |

*Non-Voting Members in Attendance:*

■ **Dro Sohrabian** ☐ **Michael Bosak** ☐ **Marka Fields**

**Applicant Signature & Date:** **Virtual Meeting – No Signature Required**

# Concept Plan

March 24, 2022

**Case 22-031**: Little Italy Historic District
**CWRU South Residential Campus Murray Hill Road**
New Construction of Student Residences Phase 1 & 2
Ward 6: Griffin
Project Representatives: Christopher Panichi, Joanne Brown, CWRU; Sindu Meier, William Rawn Associates

CASE WESTERN RESERVE UNIVERSITY EST. 1826
CAMPUS PLANNING & FACILITIES MANAGEMENT

**Office of Planning, Design & Construction**

Case Western Reserve University
10620 Cedar Avenue
Cleveland, Ohio 44106-7228
Phone 216.368.6907
Fax 216.368.0765

March 10, 2022

PROJECT SUMMARY – CWRU - SRV RESIDENCE HALLS

Case Western Reserve University (CWRU) is proposing additional housing on our south campus to support second-year students. Due to increased class size, current second year student housing is divided. Second-year students are primarily housed in the South Residential Village with the overflow being accommodated in Clarke Tower within the North Residential Village. The university desires to bring second year students together to build a stronger connection and strengthen the sense of community. CWRU recently renovated our south dining hall, Fribley Commons, to support the existing and future second-year students.

CWRU is proposing the addition of 600 new beds within 2 new residence halls – a 56,900 GSF "Murray Building", fronting on Murray Hill Road; and a 139,100 GSF "Hill Building" located behind (southeast) of the "Murray Building". These buildings will replace existing parking Lot #5 (located near the intersection of Murray Hill and Adelbert Rd. between Fribley Commons and Greek houses) and slightly encroach into vacant land owned by CWRU.

It is important to note that CWRU is also seeking a zoning map amendment as part of this project process. The property is currently zoned MF-C1, with adjacent properties zoned both MF-D2 and MF-E3. Rezoning to the MF-D2 district and map amendment will result in complete compliance of this project. Both the zoning map amendment and design review approval processes are running simultaneously, with a goal of completion by summer of 2022.

The university has ample parking available within proximity existing lots. Parking capacity of these proximity lots totals over 1,400 spaces, with 363 spots unassigned and available. The number of parking spots required to accommodate both the new halls and replacement of the "lost" parking of Lot #5 is 328.

Our architectural landscape consultant is in conversations with the City of Cleveland's Urban Forestry department to develop a Tree Preservation Plan. Finalization will occur with the change



# SRV RESIDENCE HALLS - PHASE I & II

## LITTLE ITALY NEIGHBORHOOD AND CITY REVIEW

## MARCH 15, 2022

# AGENDA

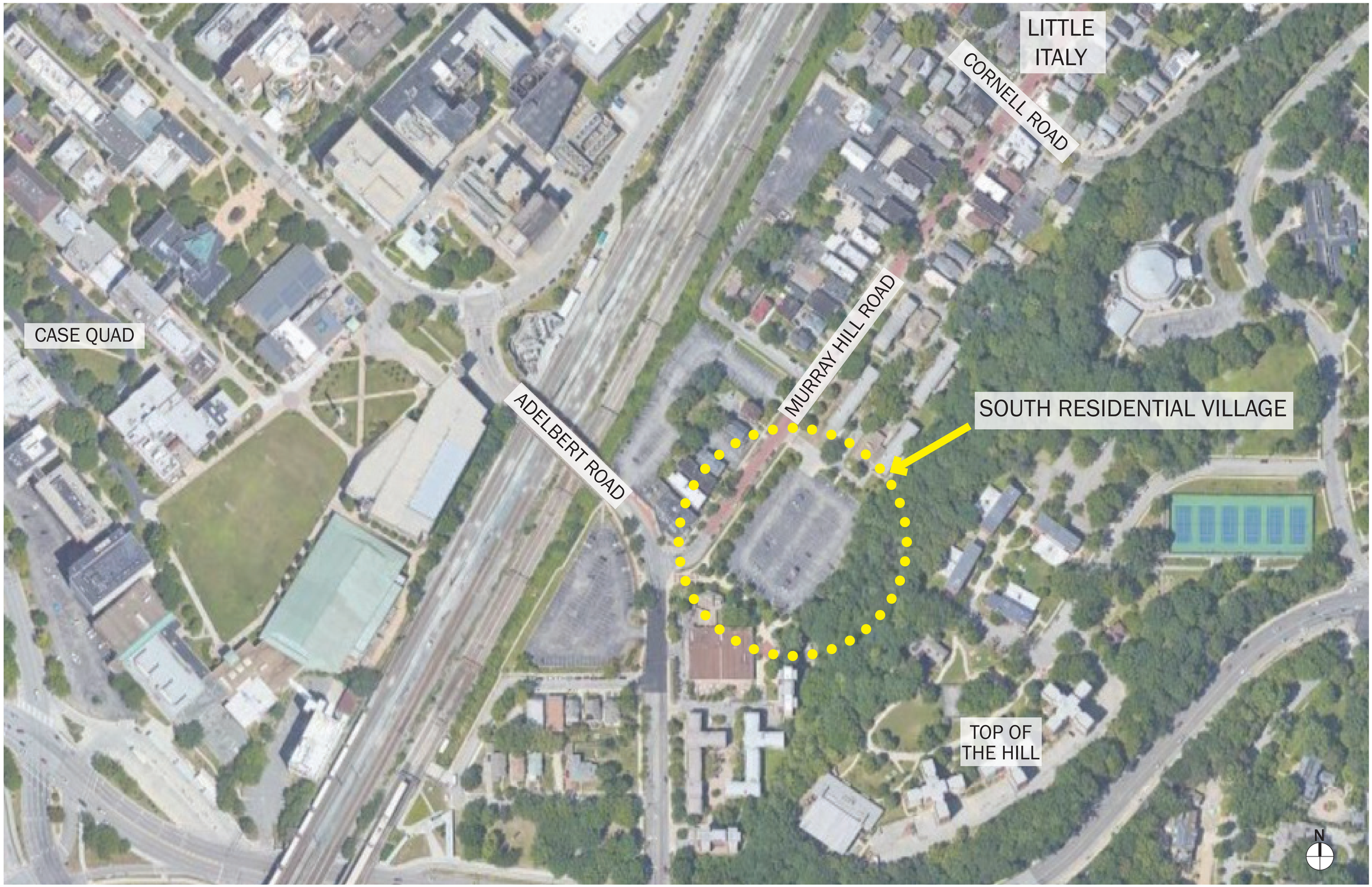
PROJECT INTRODUCTION

SCHEDULE

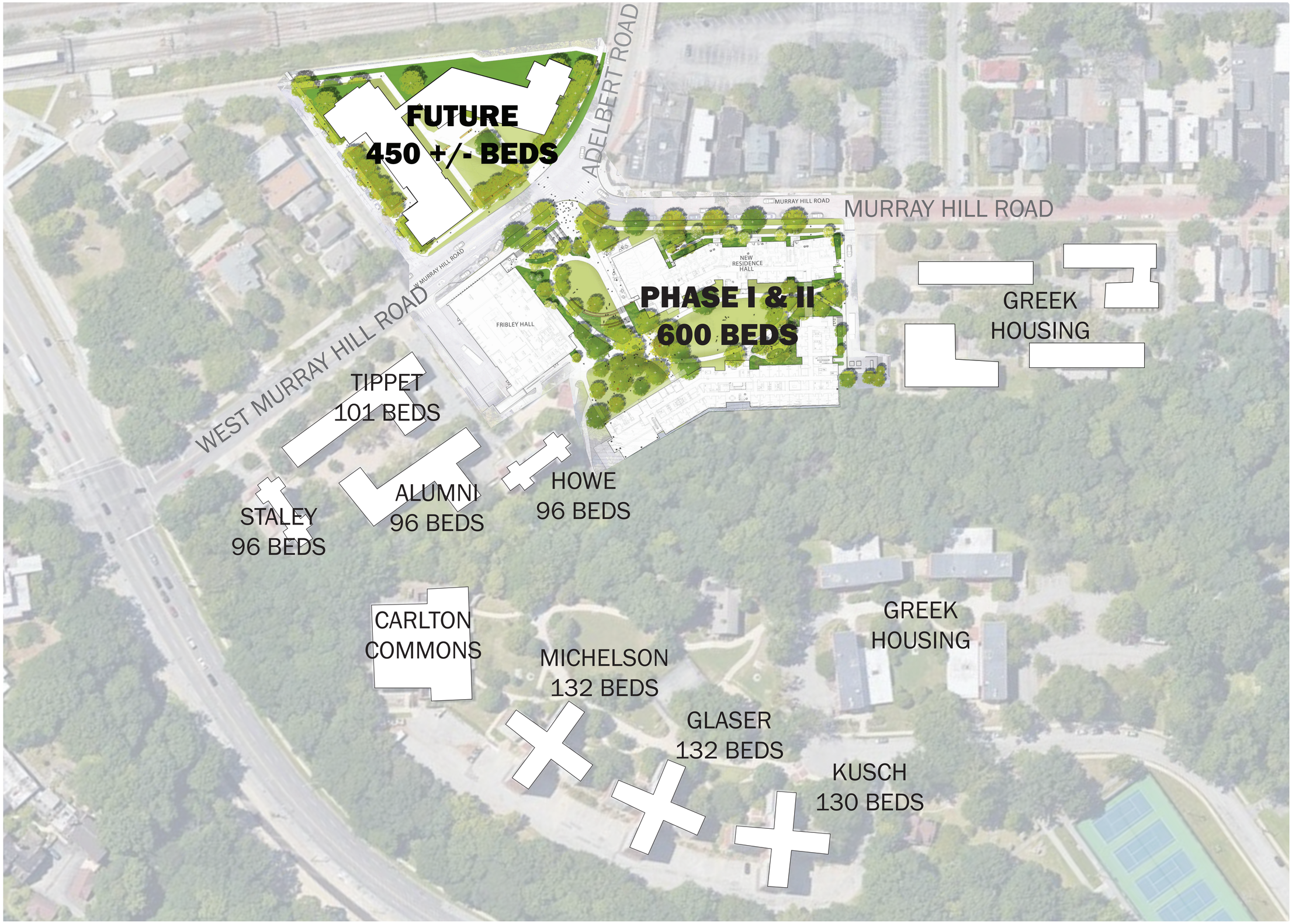
ZONING

PARKING APPROACH


NORTH RESIDENTIAL VILLAGE
MAYFIELD ROAD
NORD FAMILY GREENWAY
MATHER QUAD
CORNELL ROAD
LITTLE ITALY
EUCLID AVE.
ADELBERT ROAD
MURRAY HILL ROAD
CASE QUAD
SOUTH RESIDENTIAL VILLAGE
TOP OF THE HILL
N

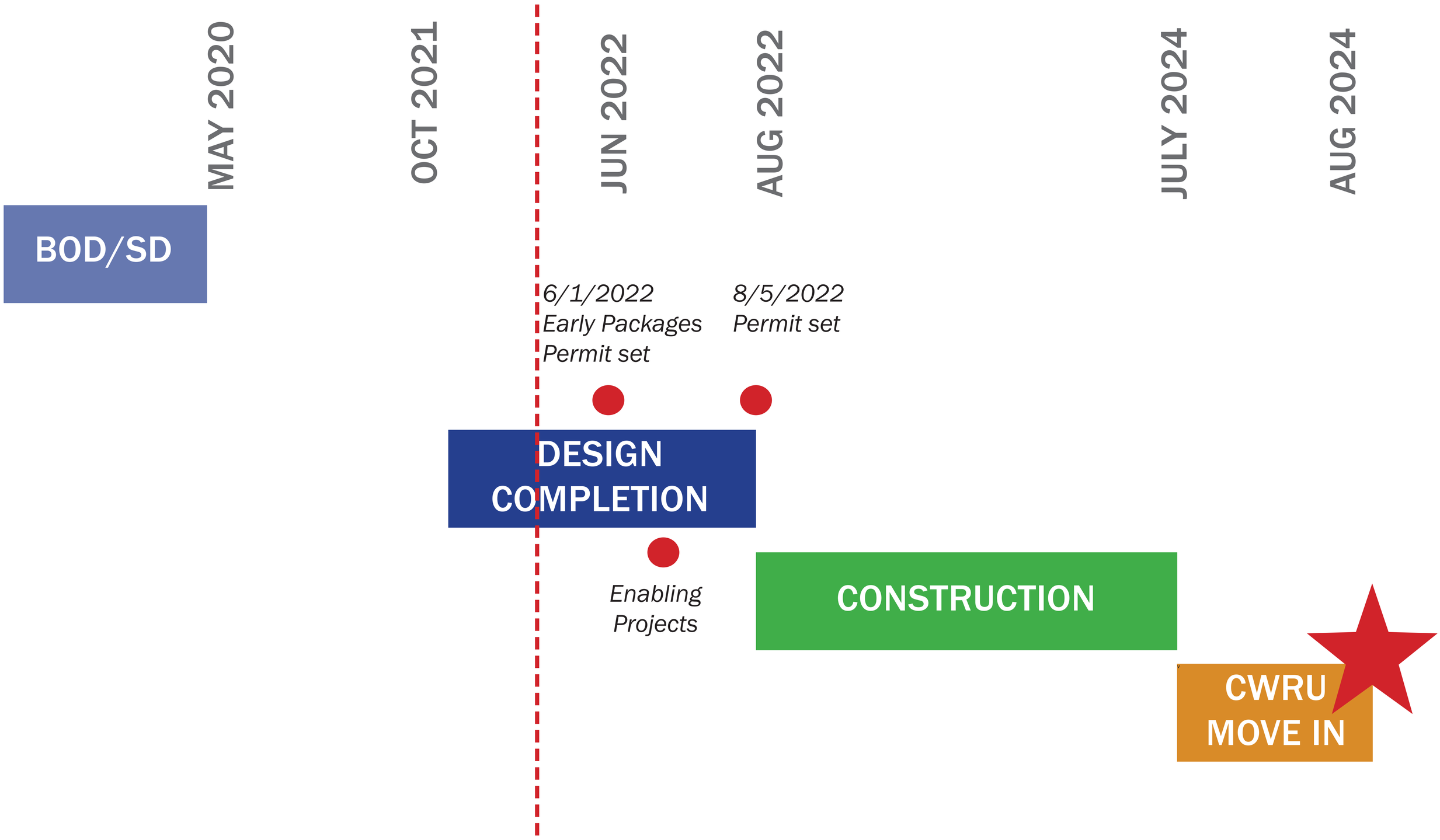

LITTLE ITALY
CORNELL ROAD
CASE QUAD
MURRAY HILL ROAD
ADELBERT ROAD
SOUTH RESIDENTIAL VILLAGE
TOP OF THE HILL
N

# CWRU SOUTH CAMPUS MASTERPLAN



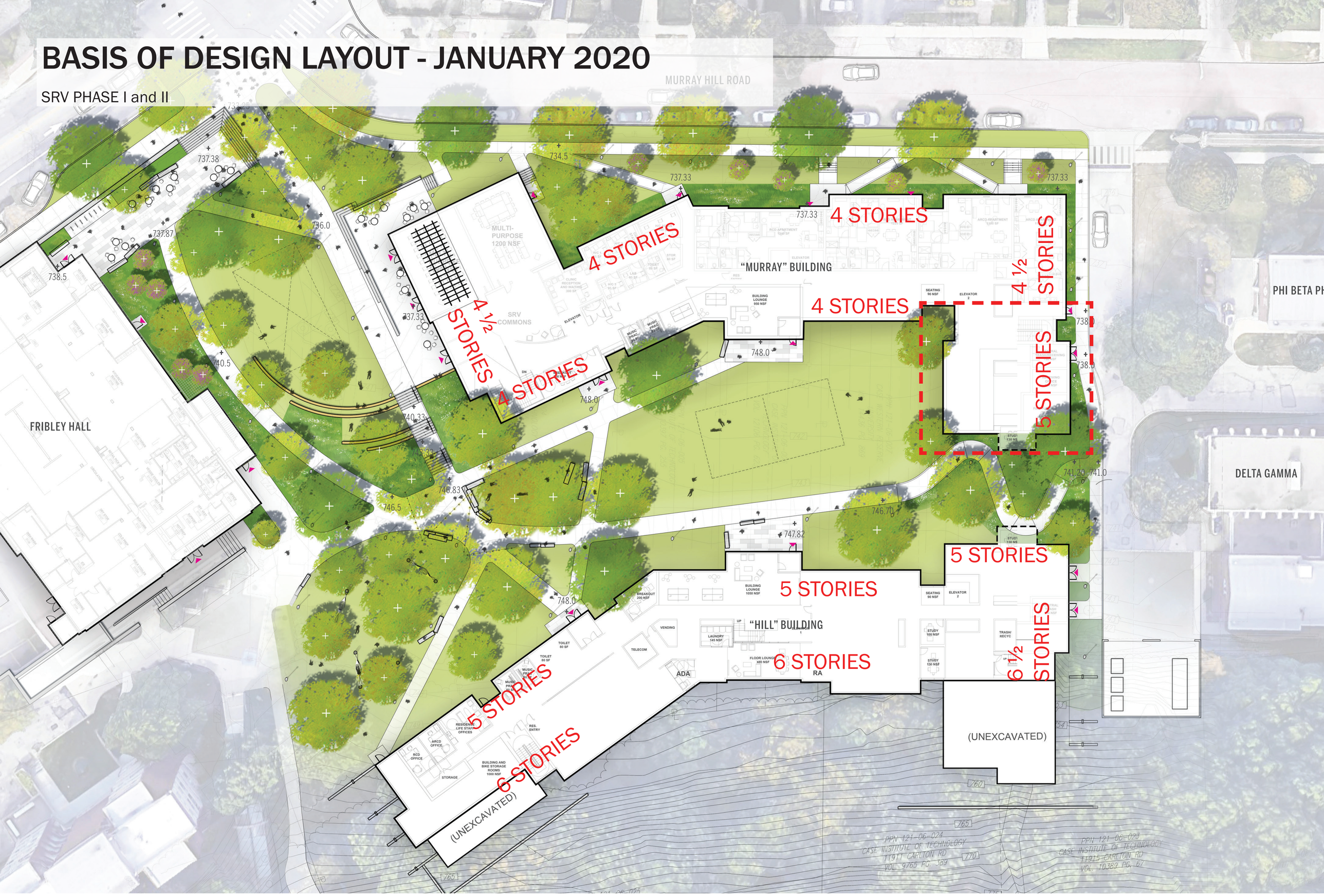
# 600 BEDS
# (Second Year Students)
# OPEN FALL 2024

# PROJECT SCHEDULE



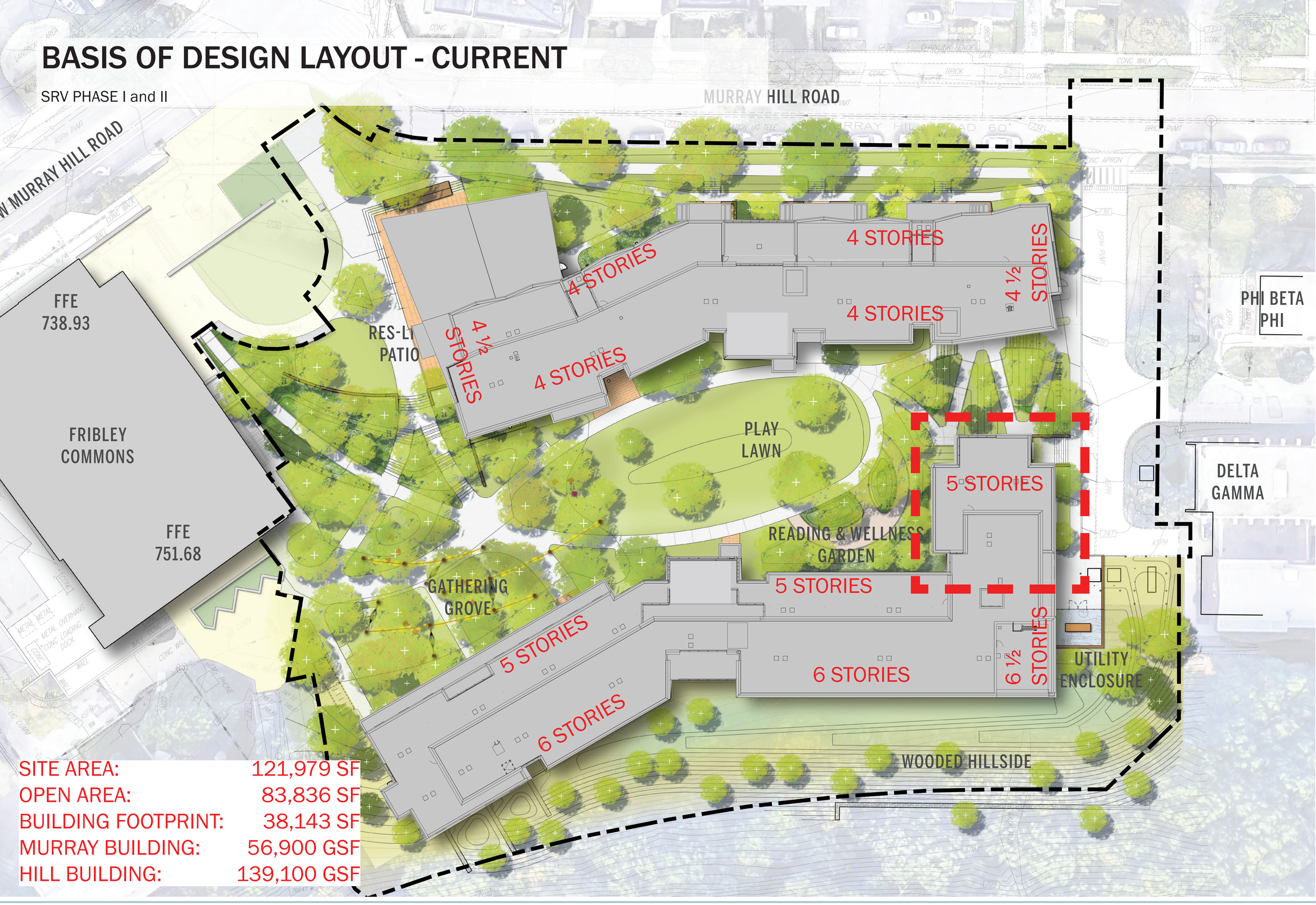
# BASIS OF DESIGN LAYOUT - JANUARY 2020

SRV PHASE I and II



# BASIS OF DESIGN LAYOUT - CURRENT

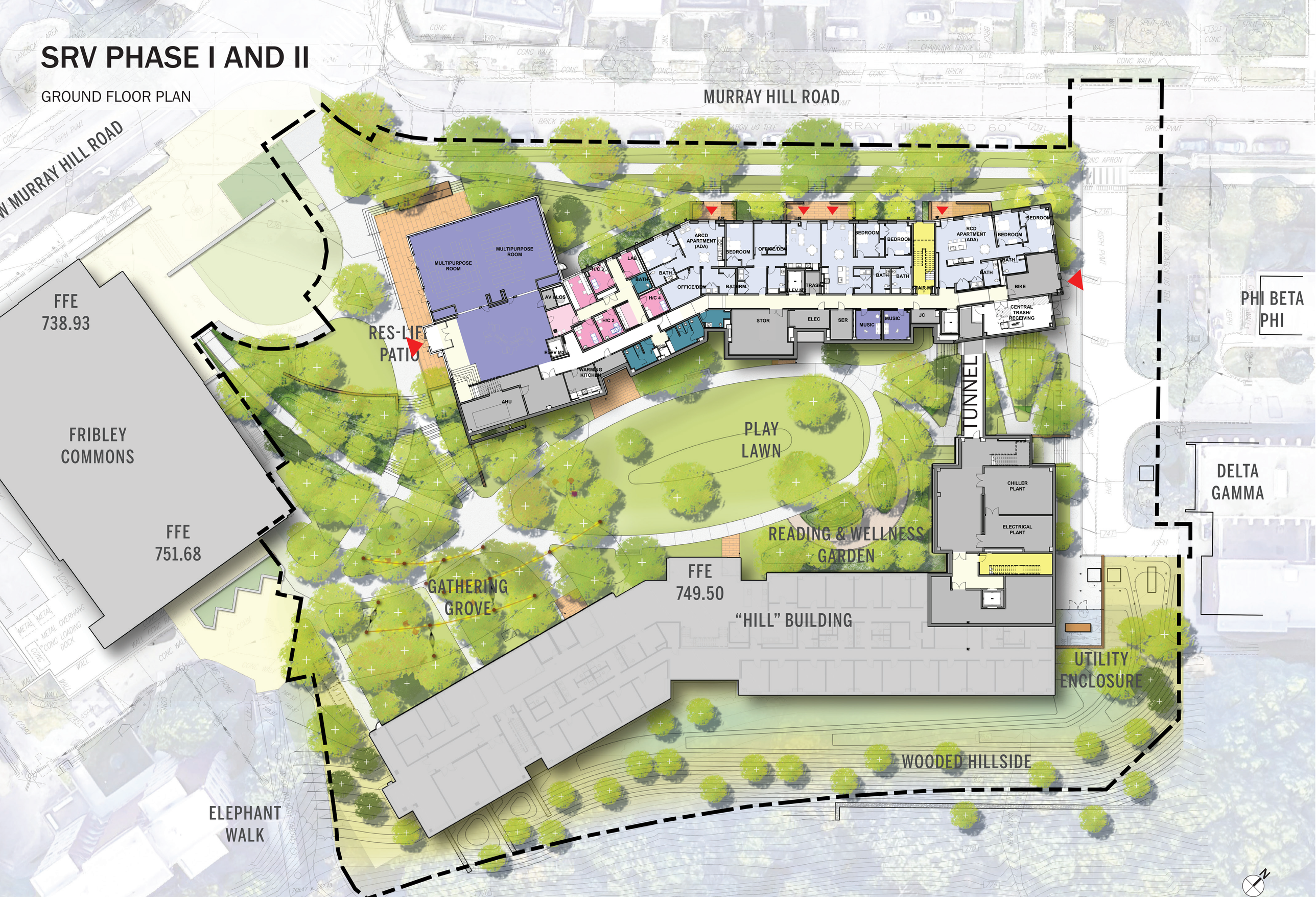
SRV PHASE I and II




| | |
|---|---|
| SITE AREA: | 121,979 SF |
| OPEN AREA: | 83,836 SF |
| BUILDING FOOTPRINT: | 38,143 SF |
| MURRAY BUILDING: | 56,900 GSF |
| HILL BUILDING: | 139,100 GSF |

# SRV PHASE I AND II

GROUND FLOOR PLAN



# SRV PHASE I AND II

LEVEL 01 PLAN

MURRAY HILL ROAD

W MURRAY HILL ROAD

FFE
738.93

FRIBLEY
COMMONS

FFE
751.68

RES-LI
PATIO

PLAY
LAWN

READING & WELLNESS
GARDEN

GATHERING
GROVE

UTILITY
ENCLOSURE

WOODED HILLSIDE

ELEPHANT
WALK

PHI BETA
PHI

DELTA
GAMMA

DOUBLE
FLOOR LOUNGE
VENDING
LAUNDRY
ADA BATH
BATH
ELEC
STUDY
OPEN LOUNGE
TRASH
JC
ADA SUITE
BUILDING LOUNGE
RA M01
OPEN STUDY
VEST-EAST-2
RCD
ARCD
STOR
RES LIFE STAFF
VEST-EAST-1
CONF
RA H02
CENTRAL TRASH
VEST-WEST-2
RA H01
ADA DOUBLE
VEST-WEST-1
MUSIC PRAC
STAIR H2
STAIR H3
AHU
BIKE
BUILD STOR

# SRV PHASE I AND II

TYPICAL FLOOR

MURRAY HILL ROAD

W MURRAY HILL ROAD

SECTION A

FFE
738.93

FFE
751.68

FRIBLEY
COMMONS

RES-LIFE
PATIO

PLAY
LAWN

READING & WELLNESS
GARDEN

GATHERING
GROVE

UTILITY
ENCLOSURE

WOODED HILLSIDE

ELEPHANT
WALK

PHI BETA
PHI

DELTA
GAMMA

SECTION A

N

CASE WESTERN RESERVE UNIVERSITY EST. 1826
SOUTH RESIDENTIAL VILLAGE

*SRV RESIDENCE HALLS - PHASE I & II*
*MARCH 15, 2022*

WILLIAM RAWN ASSOCIATES | Architects, Inc.

# EXISTING CONTEXT



Corner of Murray Hill Road


Parking Lot from Pathway


Parking Lot @ Base of Hill


Parking Lot Entry @ NE Corner



Terrace @ Fribley


Murray Hill Road Looking South

# LITTLE ITALY: SCALE AND CONTEXT


View of Murray Hill Road Looking Toward Fribley


View of Murray Hill Road Looking North


View Across Murray Hill Road from Site


View of Murray Hill Road Looking Toward Greek Houses


View of Murray Hill Road Looking South


View of Murray Hill Road Looking Toward Greek Houses

# LITTLE ITALY: RECENT & UNDER CONSTRUCTION PROJECTS







# OTHER NOTABLE BUILDINGS IN AREA







# FRIBLEY COMMONS RENOVATION








# RENDERED ELEVATION

VIEW FROM ACROSS MURRAY HILL ROAD







KEYPLAN

# RENDERED VIEW

VIEW FROM MURRAY HILL ROAD






SIGN DEVELOPMENT SITE PLAN

PERSPECTIVE KEYPLAN

# RENDERED VIEW

VIEW FROM ACROSS MURRAY HILL ROAD







KEYPLAN

# RENDERED VIEW

VIEW ALONG MURRAY HILL ROAD







SIGN DEVELOPMENT SITE PLAN

PERSPECTIVE KEYPLAN

# RENDERED VIEW

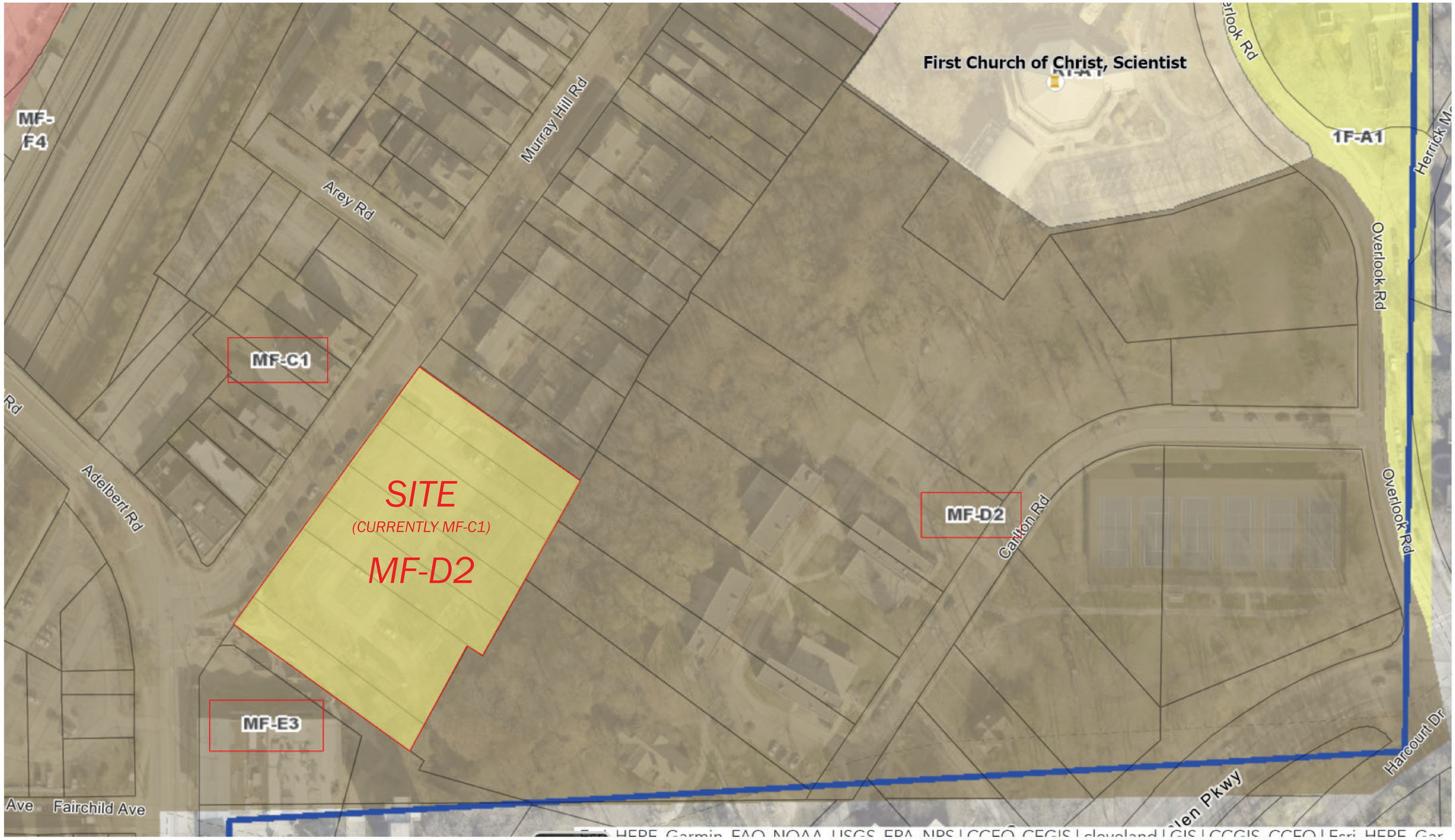
VIEW FROM INTERSECTION AT ADELBERT AND MURRAY HILL




PERSPECTIVE KEYPLAN

# ZONING

# ZONING MAP


First Church of Christ, Scientist
MF-F4
Murray Hill Rd
Arey Rd
MF-C1
SITE
(CURRENTLY MF-C1)
MF-D2
1F-A1
Overlook Rd
Herrick Ma
MF-D2
Carlton Rd
Overlook Rd
Adelbert Rd
MF-E3
Harcourt Dr
Fairchild Ave
len Pkwy

# BUILDING ZONE MAP AMENDMENT

## *1. CWRU PLOT CONSOLIDATION*

*A. DESIGNATE AS MF-D2*

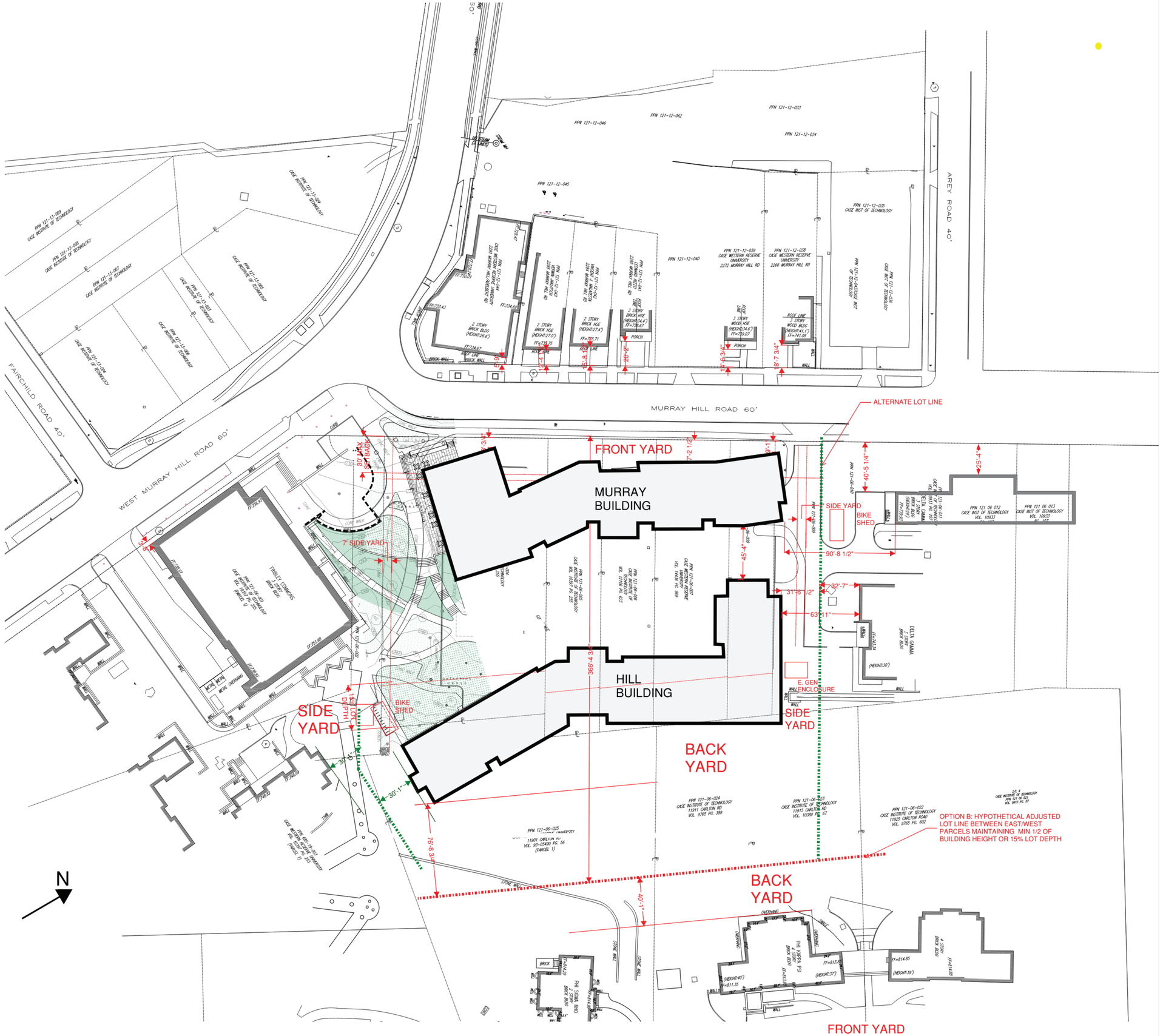
*B. FRONT YARD = 8’-0” SET BACK*

## *2. BUILDING HEIGHT*

*A. 60’ ALLOWABLE HEIGHT*

*B. 2’ ADDITIONAL VERTICAL HEIGHT FOR EVERY ONE FOOT BUILDING IS BEYOND THE SETBACK*

***RESULT = COMPLIANT PROJECT***



MURRAY HILL ROAD 60'
WEST MURRAY HILL ROAD 60'
FAIRCHILD ROAD 40'
AREY ROAD 40'
ALTERNATE LOT LINE
FRONT YARD
MURRAY BUILDING
HILL BUILDING
SIDE YARD
BACK YARD
BIKE SHED
E. GEN ENCLOSURE
OPTION B: HYPOTHETICAL ADJUSTED LOT LINE BETWEEN EAST/WEST PARCELS MAINTAINING MIN 1/2 OF BUILDING HEIGHT OR 15% LOT DEPTH
N

**ASSUMPTIONS:**

CLEVELAND OH CODE OF ORDINANCES
PART 3: LAND USE CODE

SITE IS MULTI-FAMILY DISTRICT **(MF-D2)**

MULTIPLE DWELLINGS CLASS B -
DORMITORIES (325.51)

**BUILDING HEIGHT: 60'**

**FRONT YARD** SETBACKS [357.04 A]:
15% OF THE LOT (NOT TO EXCEED 30')

**FRONT YARD** SETBACK [357.06]
EXCEPTION (A):
ALIGNMENT TO EXISTING BUILDINGS
(FRIBLEY, GREEK HOUSES, OPP. SIDE
MURRAY HILL)

**REAR YARD** SETBACKS [357.08]:
15% OF THE LOT OR 1/2 THE BUILDING
HEIGHT

**SIDE YARD** SETBACKS [357.09]:
7' MINIMUM

**MURRAY BUILDING HEIGHT:**

Street Side:
LEVEL 00- LOWER ROOF 48'-10"
LEVEL 00-UPPER ROOF: 62'-10"

Quad Side:
LEVEL 01 - ROOF: 49'-8"

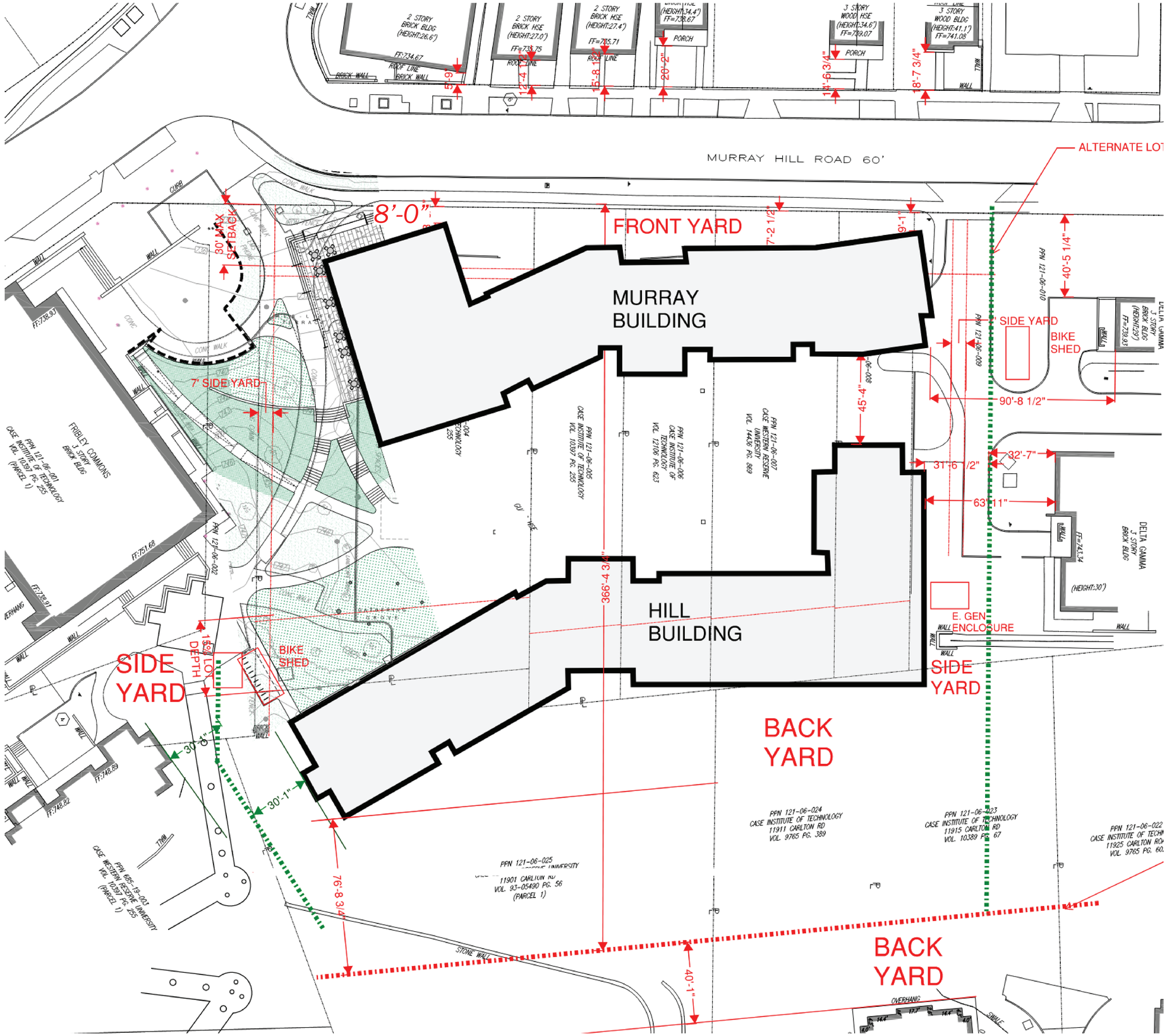
**HILL BUILDING HEIGHT:**

Greek Housing Side:
MECH EGRESS-ROOF: 77'-2"

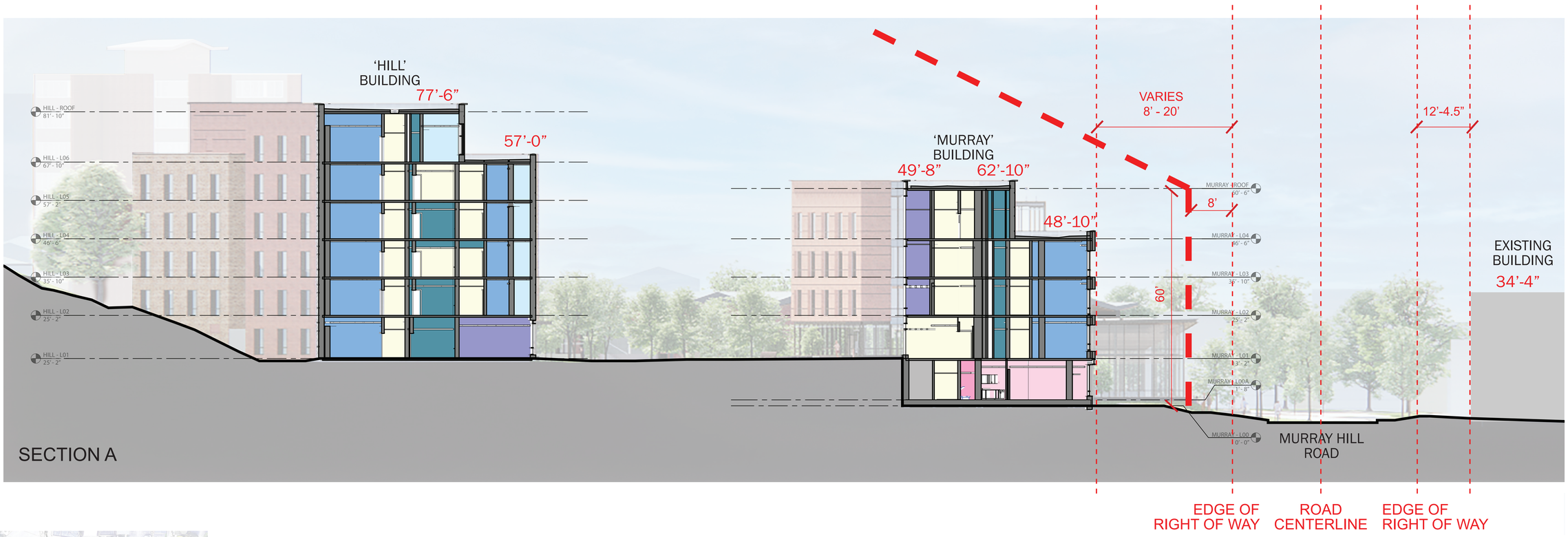
Quad Side:
Level 00-Lower Roof: 57'-0"
Level 00 - Upper Roof: 77'-6"

Hill Side:

LEVEL 01 - ROOF: 69'-10"



# SITE SECTION







KEYPLAN

# PARKING

# PARKING ANALYSIS

CLEVELAND OH CODE OF ORDINANCES
PART 3: LAND USE CODE

337.13 Required Parking Spaces (Table)
Dormitories, Fraternities and sororities houses
1 for each 4 beds, plus 1 for the operator or managers living on the premises, plus one for each other employee expected on the premises during the largest work shift period.

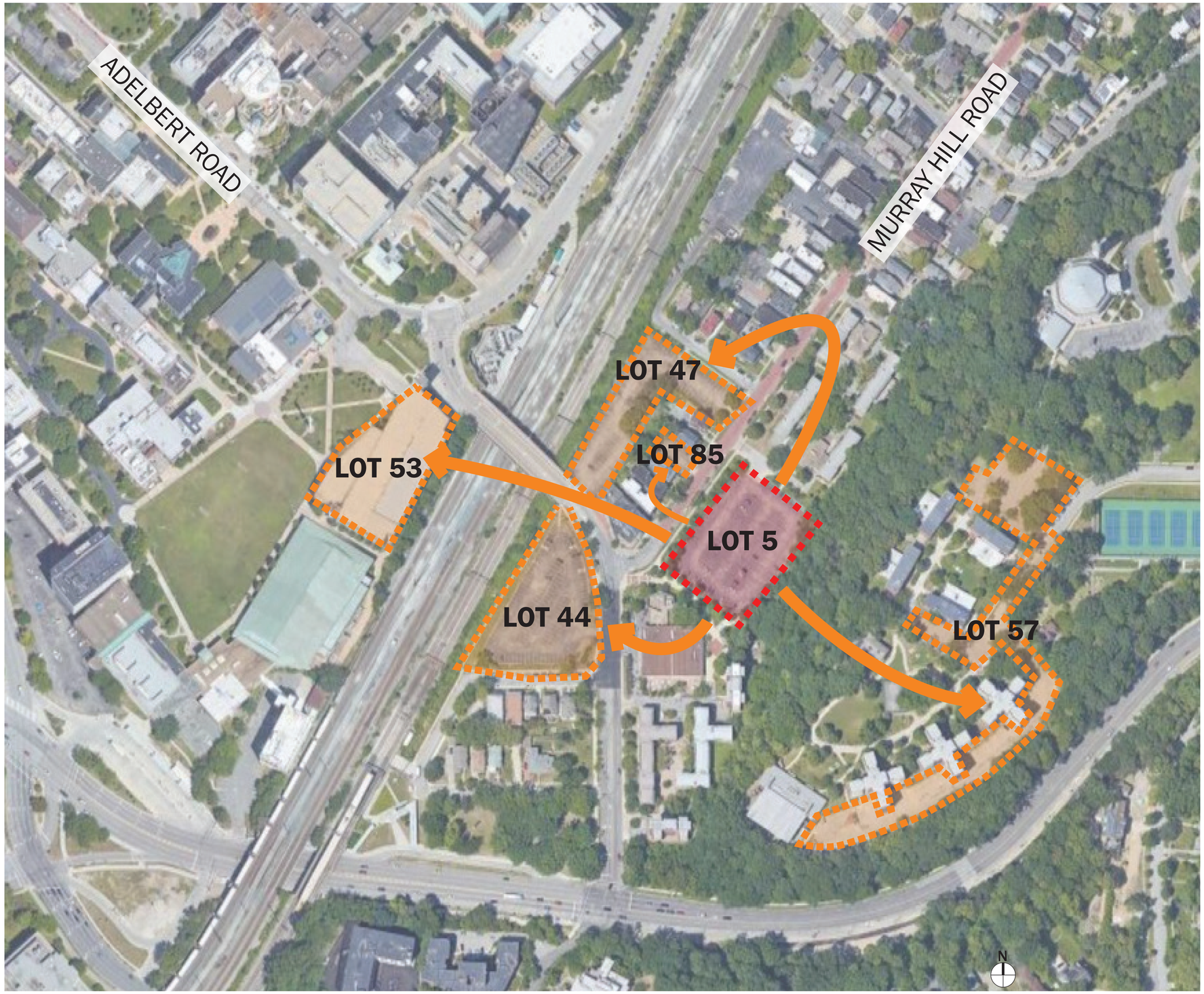
Parking for SRV (Phases 1 and 2)

600 beds = 150 spaces
4 Staff Apartments = 4 spaces
0 Full time Maintenance staff = 0 spaces

Total = 154 spaces

| SRV PARKING ANALYSIS | | |
|---|---|---|
| **PARKING SPACES REQUIRED** | | |
| New SRV bed count | 600 | 150 |
| (4) full time staff at 1 space each | | 4 |
| Replacement of Lot 5 parking | | 174 |
| **TOTAL REQUIRED** | | **328** |

| PARKING SPACES AVAILABLE | | |
|---|---|---|
| | Neighboring Lot capasity | Open spaces |
| Lot 44 | 137 | 36 |
| Lot 47 | 100 | 24 |
| Lot 57 | 106 | 28 |
| Lot 53 | 1070 | 272 |
| Lot 85 | 11 | 3 |
| **TOTAL AVAILABLE** | | **363** |



# VIDEO TOUR

WALKING SOUTH DOWN MURRAY HILL ROAD



# Cleveland Landmarks Commission

# Landmark Nomination

March 24, 2022

# Landmark Nomination

March 24, 2022

**Advent Evangelical Lutheran Church**
**15309 Harvard Avenue**
Ward 1: Jones
Project Representatives: Rev. Leonard Killings, Pastor; Scott Whitley, Whitley & Whitley Architects

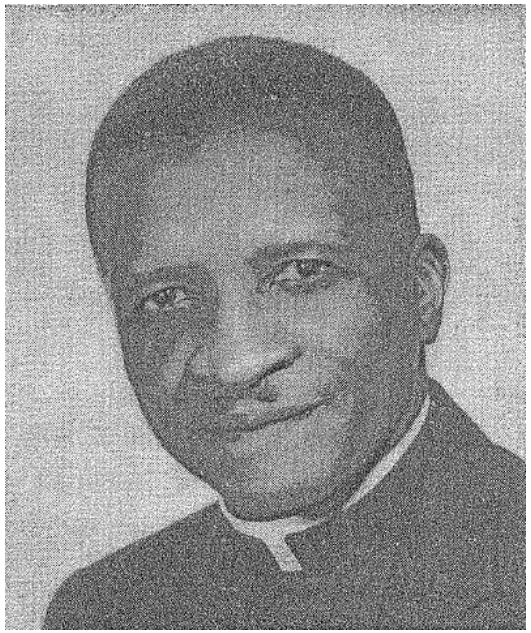
# Cleveland Landmark Nomination

Advent Evangelical Lutheran Church

15309 Harvard Avenue

East 153rd Street
East 154th Street
Harvard Avenue East

# Rev. Allen G. Youngblood



- Ordained Philadelphia Lutheran Seminary - 1945
- Organized Annunciation Lutheran Church in Philadelphia (1945-1952)
- Organized Ascension Lutheran Church in Toledo (1952-1960)
- Came to Cleveland to organize a Lutheran Church on the east side of Cleveland (1960)
- Services begun at the Masonic Temple of York Masons, 13512 Kinsman Road on November 27, 1960 with 9 members

# Lutheran Church in America

- June 1961
- Merger of four organizations
  - United Lutheran Church in America
  - Augustana Lutheran Church
  - American Evangelical Lutheran Church
  - Suomi Synod

- Lutheran Church in American merged with the American Lutheran Church, American Lutheran Church, and the Association of Evangelical Lutheran Churches in 1988 to form the Evangelical Lutheran Church of America (ELCA)

# Advent Evangelical Lutheran Church




## Interracial Church Is Organized

An interracial congregation —Advent Lutheran Church — was formally organized yesterday in what was formerly a carry-out store at 15309 Harvard Avenue S.E.

Dr. Herbert H. Veler, president of the Synod of Ohio of the United Lutheran Church in America, officiated at the rite, assisted by Dr. Albert H. Buhl, director of Home Missions of the synod. Both are of Columbus.

The organizing pastor, the Rev. Allen G. Youngblood, conducted confirmation for the 60 adult charter members. While the group is predominantly Negro, two members are white—one a teacher in the Shaker Heights public school system.

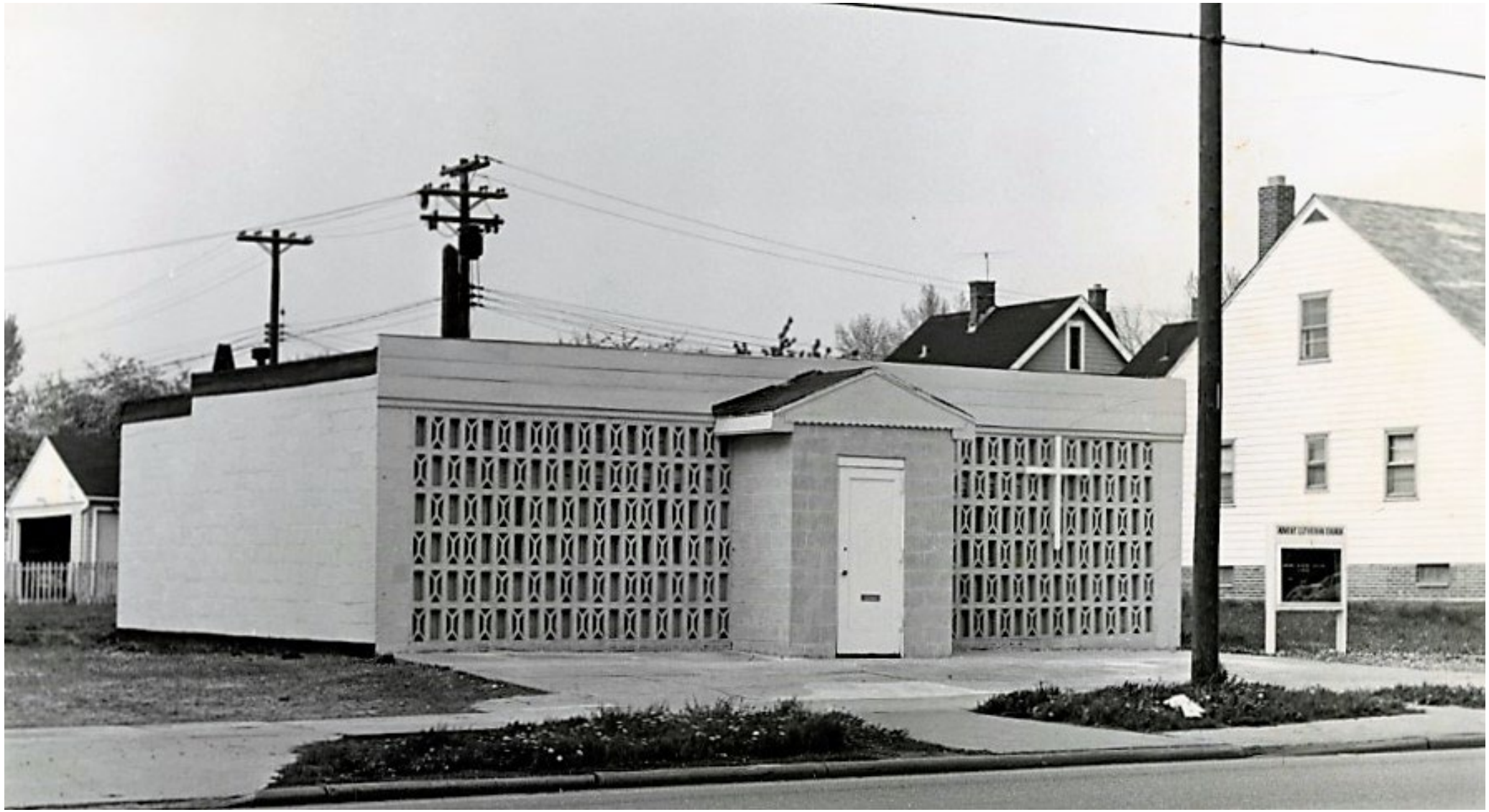
THE CHURCH anticipates beginning construction within a year for a new edifice at its present site, the pastor said.

Services, begun in December, 1960, in Masonic Temple of York Masons, were moved this spring to the former carry-out store. Church members converted the structure to give it an attractive appearance.

The Rev. Mr. Youngblood said duplicate morning services are planned to accommodate the growing congregation.

He previously has organized Annunciation Lutheran Church in Toledo.

- Moved to current location, a former carry-out liquor store in 1962
- Purchased by the Home Mission Board of the Ohio Synod
- First service in this building was on April 1, 1962
- Church officially organized on June 10, 1962



# Ohio Synod (LCA)

- Formed in September 1962
- Comprised of 337 congregations and 390 ministers

- Advent Evangelical Lutheran Church was the first to be received into the new synod sponsored by the Board of American Missions of the United Lutheran Church on September 14, 1962



# A New Church

- “Mid-century design, influenced by Usonian architecture, is unusual in that it employs the screen sub-style of modern – a style more often reserved for office rather than ecclesiastical buildings.” – *The Making of Cleveland’s Black Suburb in the City: Lee-Seville & Lee – Harvard*

- Cost of $145,000

- Architects Whitley & Whitley, Inc.

**WHITLEY/WHITLEY ARCHITECTS AND PLANNERS, LLC.**

**Whitley/Whitley, LLC.** is a firm of architects and planners established in 1963 whose work is focused on urban areas. The firm, consequently, has extensive experience in addressing in planning and design terms the problems associated with redeveloping, building and rehabilitating urban communities and public facilities.

**Whitley/Whitley LLC.,** has been responsible for designing a wide range of type and scale of public facilities including offices, schools, jails, vehicle maintenance and storage facilities, museums, libraries, post offices and mass transit facilities and has provided design services for buildings representing a range of construction costs.


THE FOUNDING PRINCIPALS

# Family of Architects and Planners



**William and James Whitley**

- First African American twin brothers registered as architects in the State of Ohio
- One of the oldest African American Architectural firms still in practice in the State of Ohio with over 60 years of design excellence.
- Firm established in 1963 by James Whitley



**R. Joyce Whitley**

- First African-American woman City Planner & Urban Designer in the United States (Chicago, 1963)
- Roosevelt Island Housing Community
- Chief Planning Advisor for the Model Cities Administration
- Cleveland Planning Commission (1975 - 1976)



**Scott Whitley**

- Second Generation Architect
- President of Whitley/Whitley Architects 2009 - Present




# Significance of Advent Lutheran Church

- Given an opportunity from the church (Advent Lutheran Church) in their community
- The first Whitley/Whitley project
- Allowed them to take a leap of faith and start a business
- Helped catapult Whitley/Whitley to its future success

## Selected Architectural Projects:

- **Tower City** "The Avenue", Cleveland, Ohio
- **Gateway "Progressive Field",** Cleveland Guardians Stadium, Cleveland, Ohio
- **Cleveland State University Clock Tower**, Cleveland, Ohio
- **Cleveland State University Wolstein Center**, Cleveland, Ohio
- **Jackson Park Terrace Highrise Towers**, Chicago, Illinois
- **Kent State University Fashion Museum**, Kent, Ohio
- **Cleveland Public Library - Lee Harvard Branch**, Cleveland, Ohio
- **John F. Kennedy High School Recreation Center**, Cleveland, Ohio
- **Cleveland Clinic Guesthouse Hotel**, Cleveland, Ohio











## Selected Planning Projects:

- **Roosevelt Island Housing Community,** New York, New York
- **New Town – In Town,** Gary Indiana
- **Master Plan Northside Preservation Group**, Saint Louis
- **Master Plan for the Civic Center,** Atlanta, Ga.
- **Master Facilities Plan for NASA Lewis Research**, Cleveland, Ohio
- **Master Plan Carver Estates**, Cleveland, Ohio
- **Six Year Housing Plan & Program,** Gary, Indiana

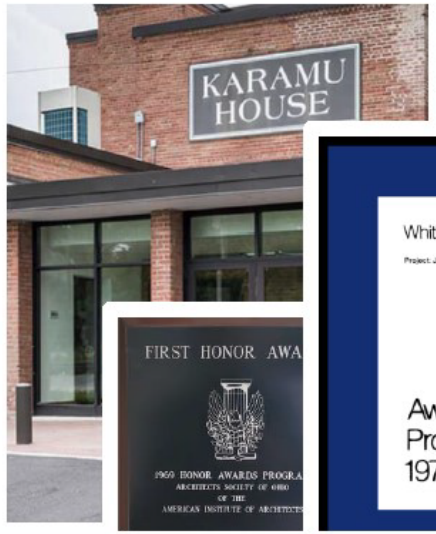





# Some Notable Achievements

- **Recognized for Architectural Design Excellence**
  - Two (2) time winner of the International Progressive Architecture Design Competition Award
  - Winner of the Architects Society of Ohio Honor Award (Multiple Awards)
  - Winner of the Excellence in Masonry Design Award (Multiple Awards)
  - Winner of the Design for a New Decade Award
  - OAMAE Design Award

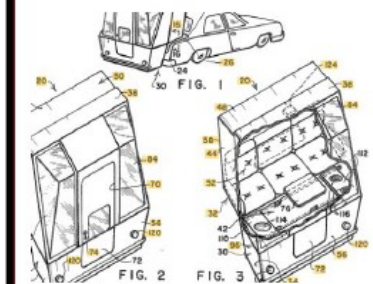
- **William Whitley** – Headed the Cleveland Housing Division of Operation PUSH during the housing crisis of the mid-1970's
- **James Whitley** – Served as President of the Urban League of Greater Cleveland (1970's)
- **The Whitley Family** was named, "1972 Family of the Year" by the Urban League of Greater Cleveland
- **William and James Whitley** – Inventors who hold eight (8) U.S. Patents
- **R. Joyce Whitley** – Playwright of the theatrical play, "Dreams of Callahan" performed at Karamu House (1990)
- **R. Joyce Whitley** – Chief Planner for the United States Department of Housing and Urban Development (1967 – 1968)
- **William Whitley** – Father of Actress/Comedian Kym Whitley, winner of 2022 NAACP Image Award





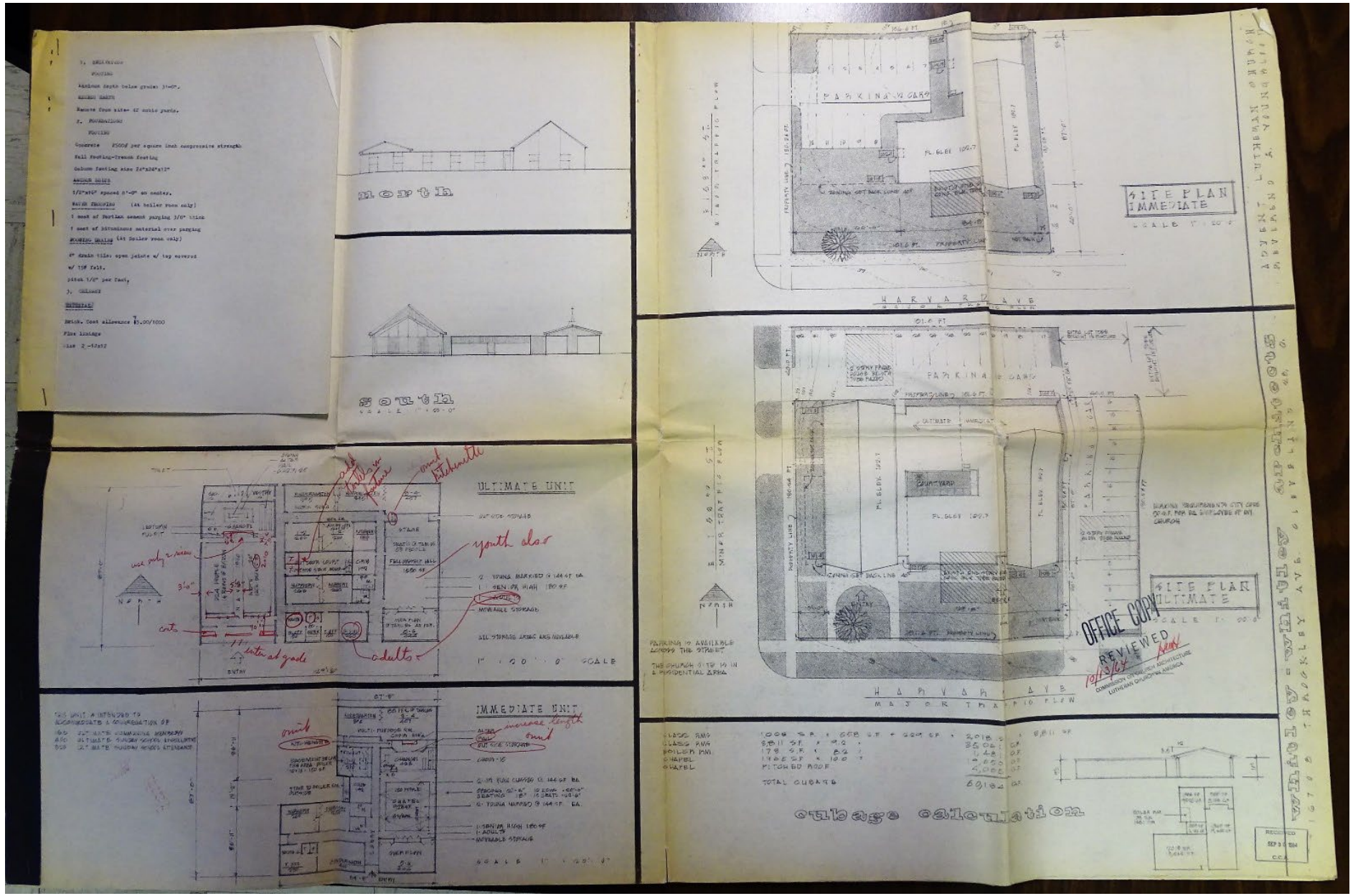


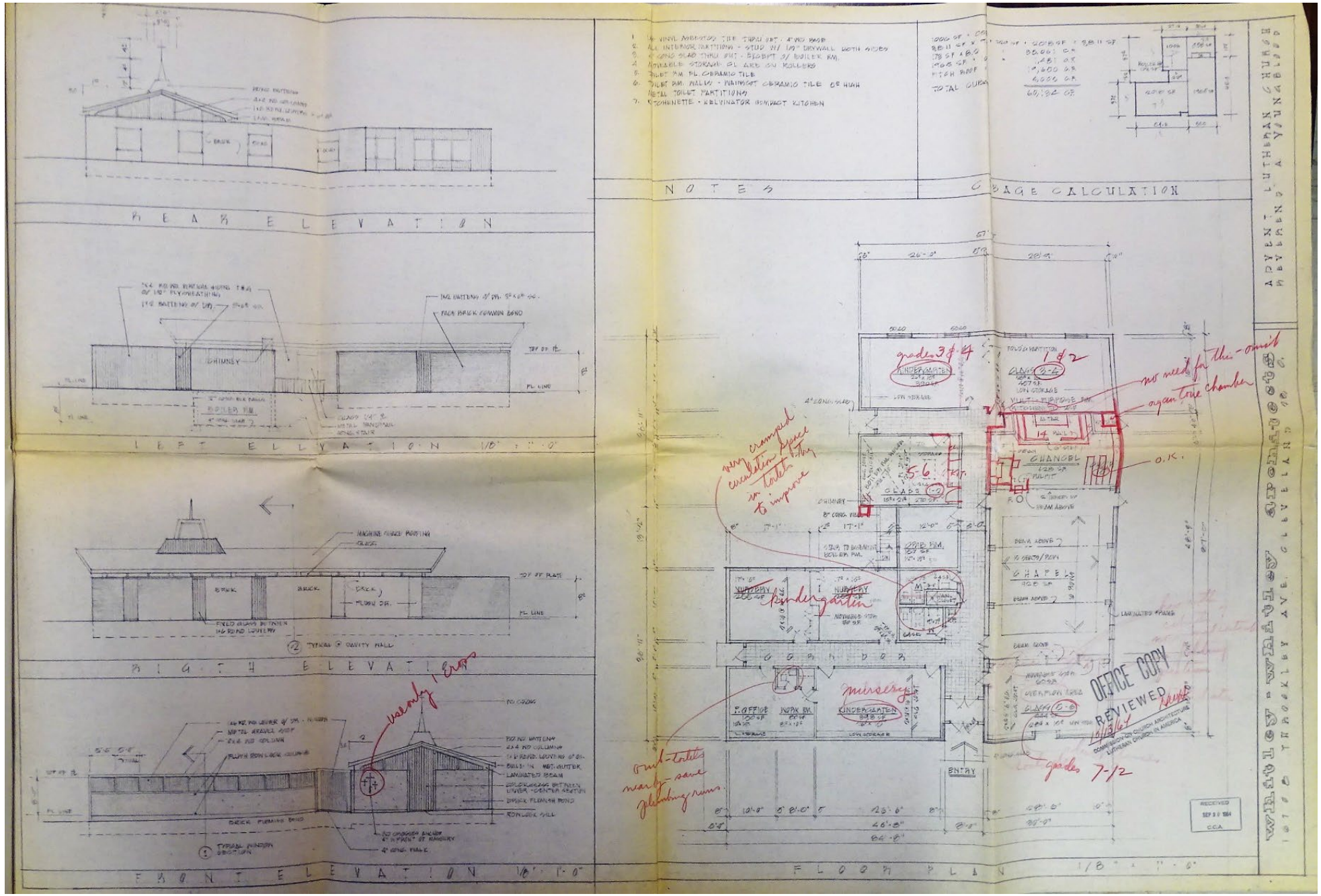


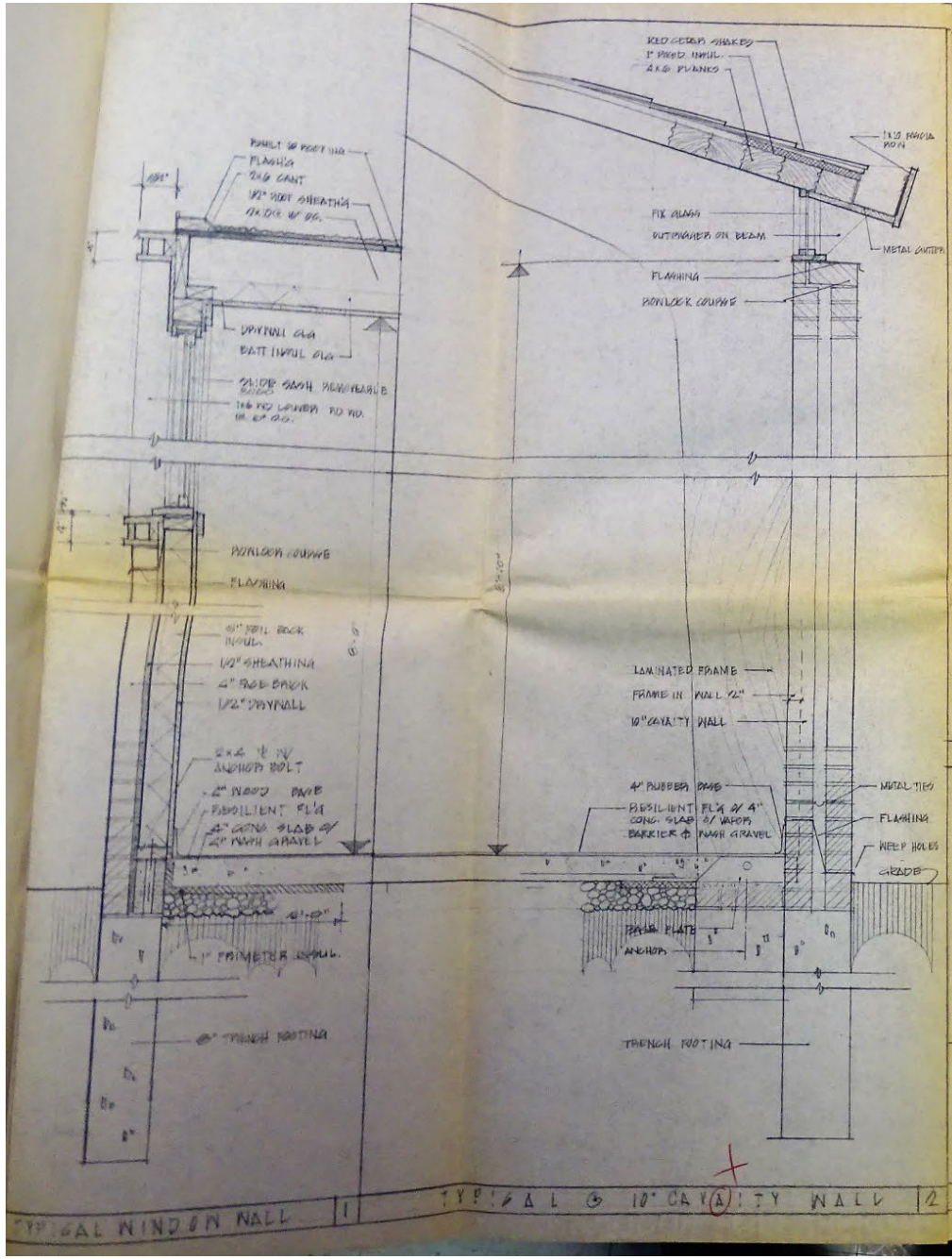



Urban League of
**Greater Cleveland**


north
south
ULTIMATE UNIT
IMMEDIATE UNIT
SITE PLAN IMMEDIATE
SITE PLAN ULTIMATE
HARVARD AVE
MAJOR TRAFFIC FLOW
PARKING IS AVAILABLE ACROSS THE STREET
THE CHURCH SITE IS IN A RESIDENTIAL AREA
OFFICE COPY
REVIEWED
10/13/64
COMMISSION ON CHURCH ARCHITECTURE
LUTHERAN CHURCH IN AMERICA
cubage calculation
ADVENT LUTHERAN CHURCH
REVEREND A. YOUNGBLOOD
whitley - whitley architects
16708 THROOKLEY AVE. CLEVELAND 28, O.
RECEIVED
SEP 3 0 1964
C.C.A.

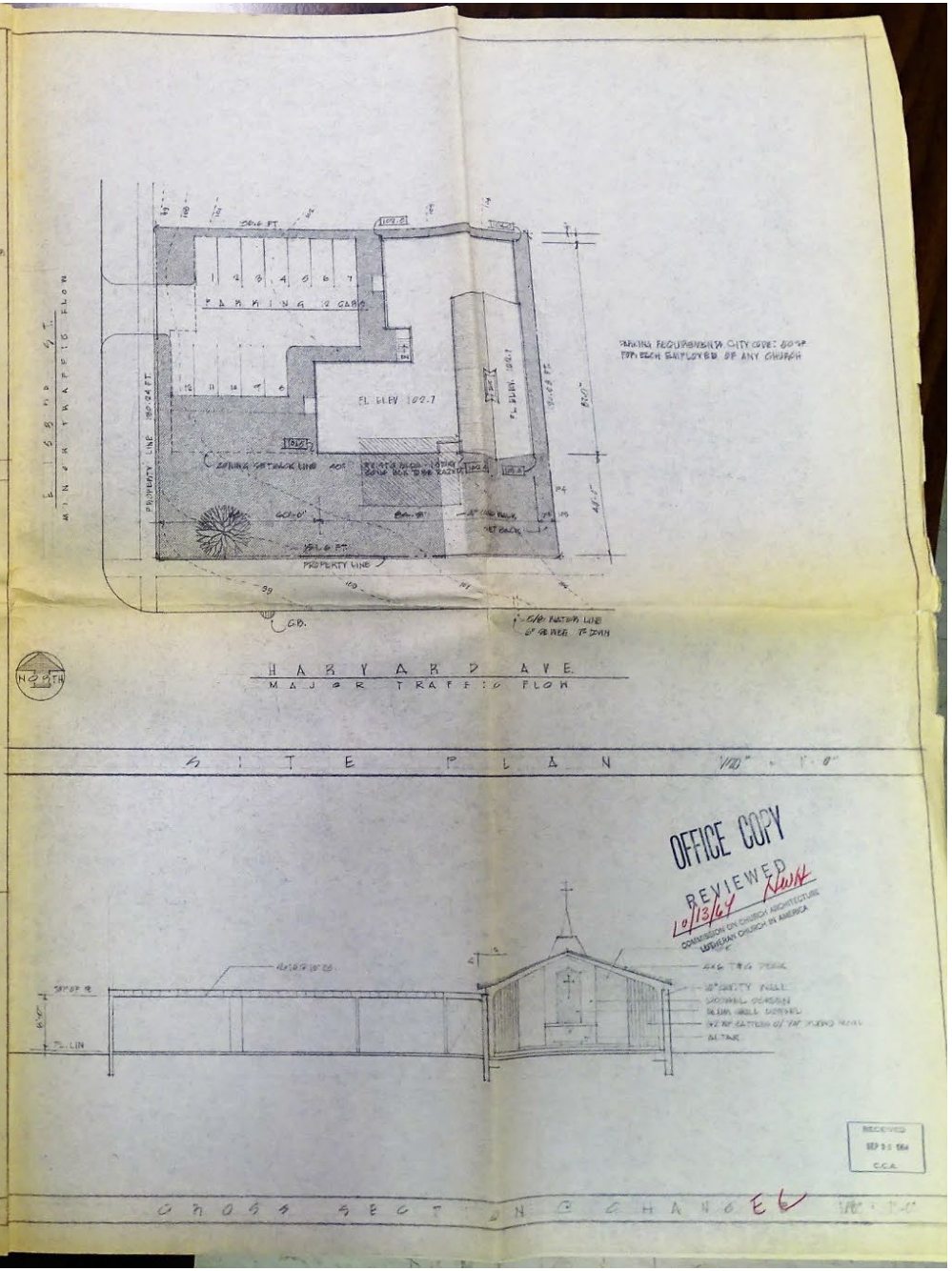


REAR ELEVATION
LEFT ELEVATION 1/8" = 1'-0"
RIGTH ELEVATION
FRONT ELEVATION 1/8" = 1'-0"
NOTES
GAGE CALCULATION
FLOOR PLAN 1/8" = 1'-0"
ADVENT LUTHERAN CHURCH
REVEREND A YOUNGBLOOD
WHATLEY - WHATLEY OPERATORS
1708 THROCKLEY AVE. CLEVELAND 18, O.
KINDERGARTEN
CHANCEL
CHAPEL
CLASS
NURSERY
ENTRY
grades 3 & 4
1 & 2
no need for this - omit
organ tone chamber
very cramped circulation space in toilets - try to improve
kindergarten
O.K.
nursery
grades 7-12
OFFICE COPY
REVIEWED
COMMISSION ON CHURCH ARCHITECTURE
LUTHERAN CHURCH IN AMERICA
RECEIVED
SEP 30 1964
CCA




TYPICAL WINDOW WALL 1

TYPICAL 10" CAVITY WALL 2




SITE PLAN 1/20" = 1'-0"



CROSS SECTION CHANGED 1/8" = 1'-0"

OFFICE COPY
REVIEWED
10/13/64
COMMISSION ON CHURCH ARCHITECTURE
LUTHERAN CHURCH IN AMERICA

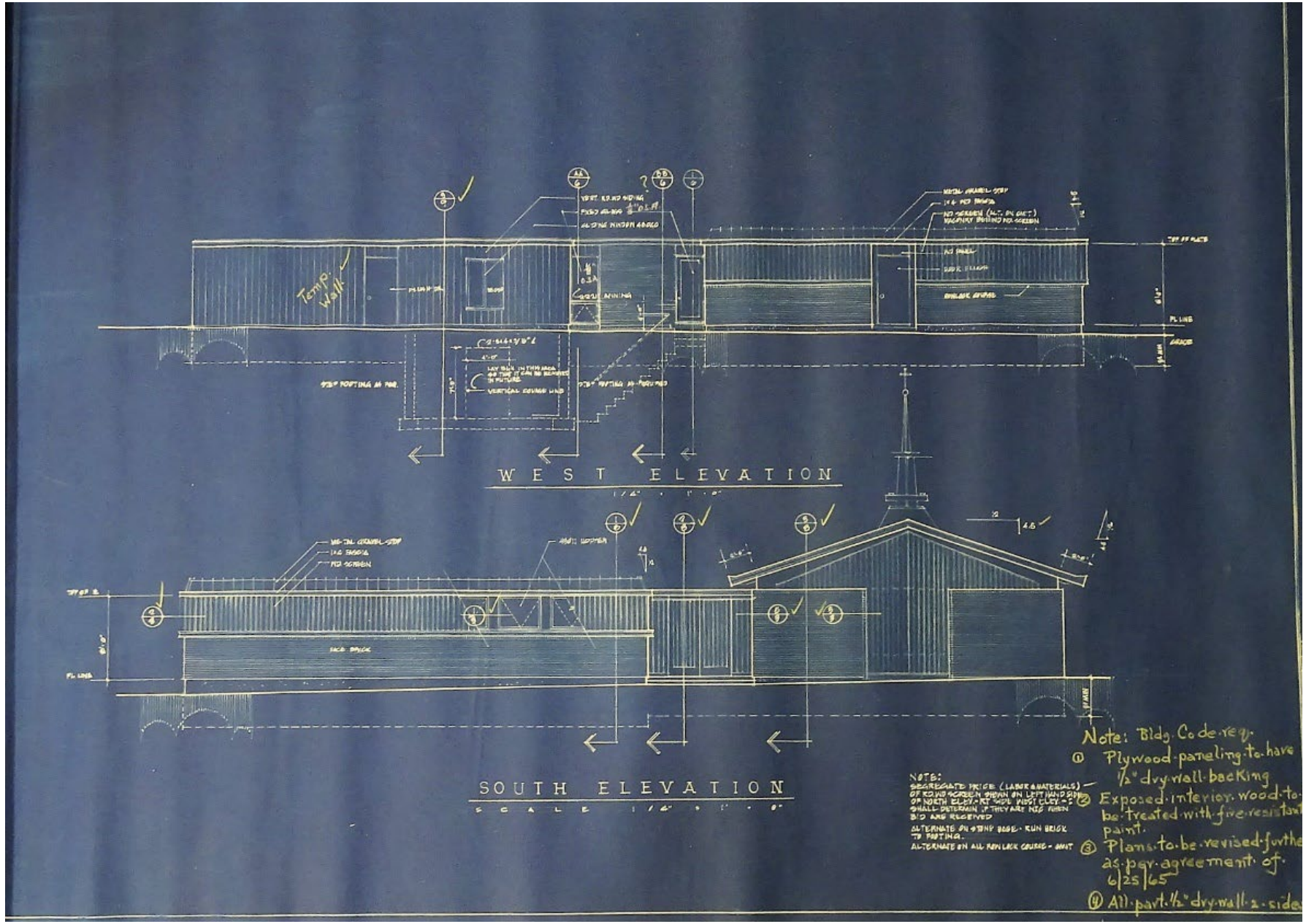
RECEIVED
SEP 30 1964
C.C.A.

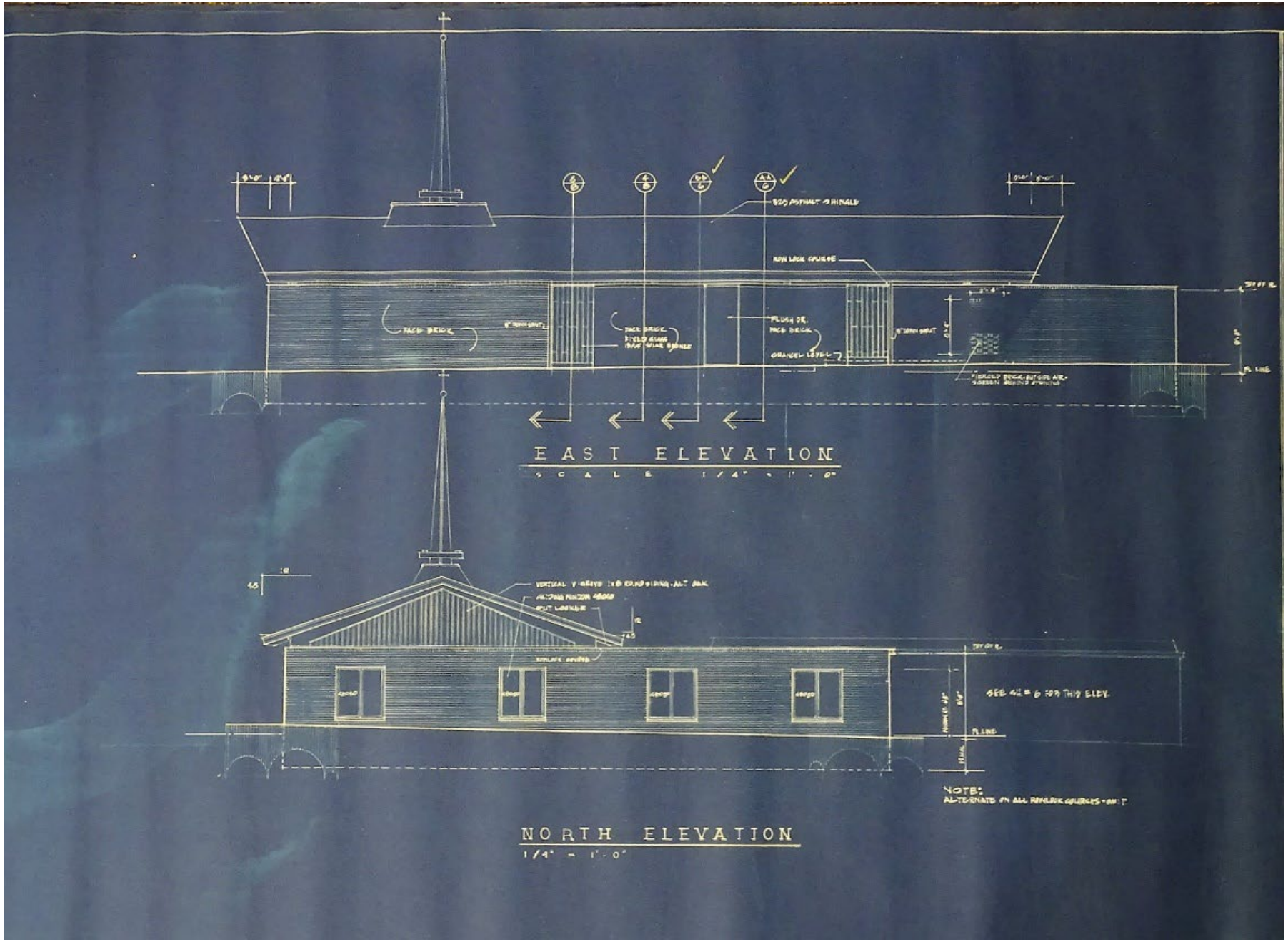
# Groundbreaking: July 7, 1965

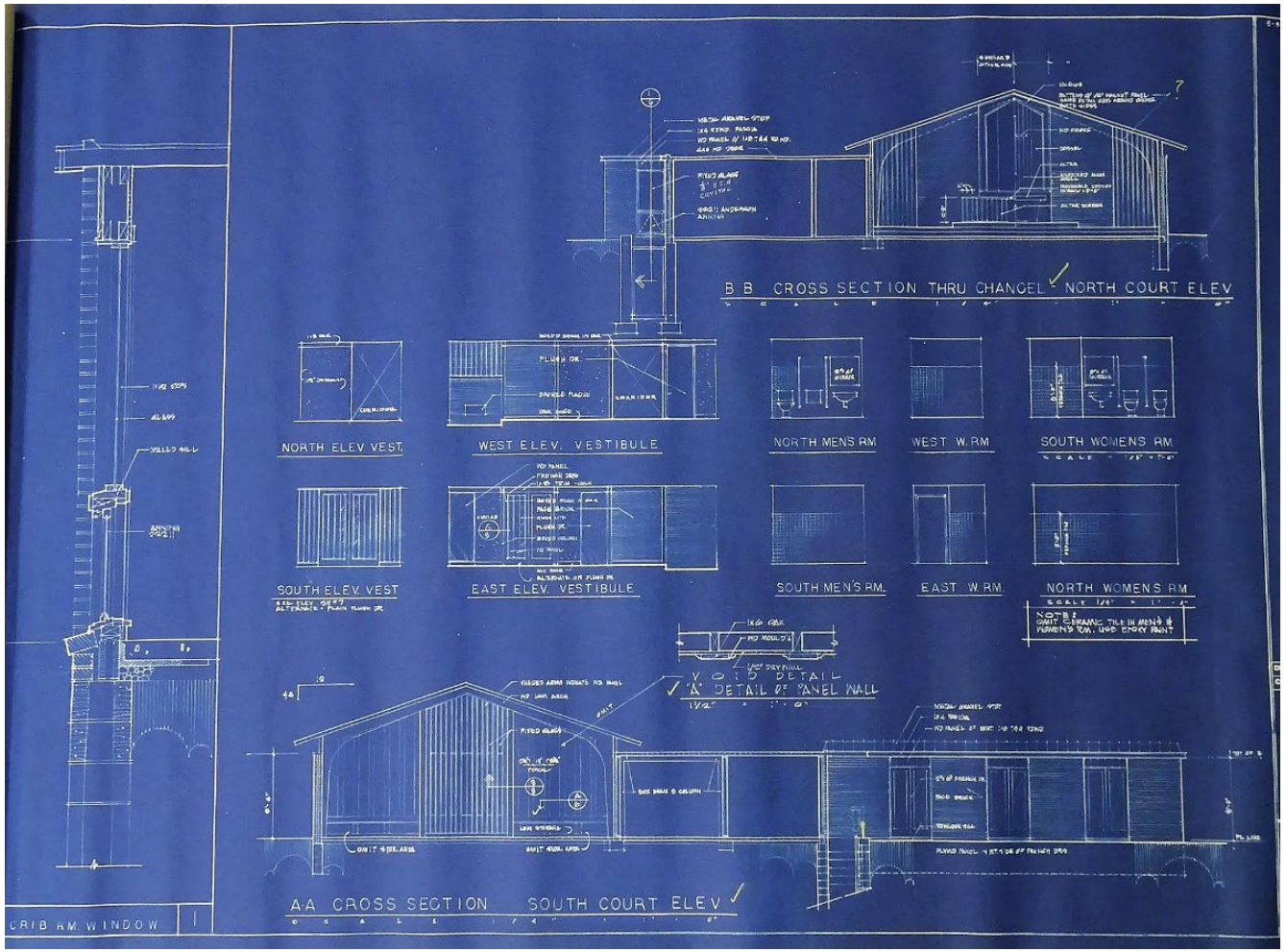


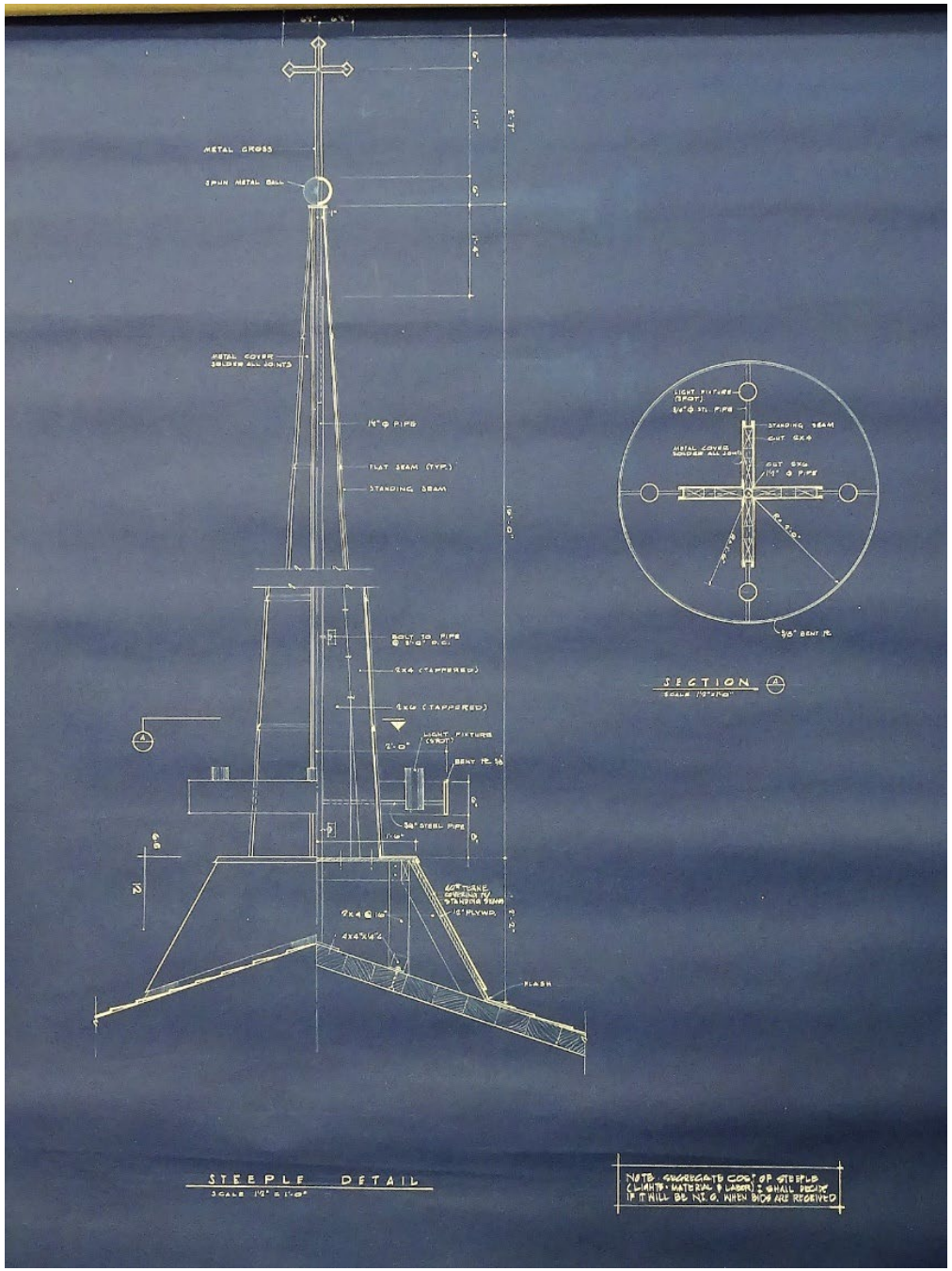





Temp. Wall
WEST ELEVATION
SOUTH ELEVATION
NOTE:
SEGREGATE PRICE (LABOR & MATERIALS) OF ROUND SCREEN SHOWN ON LEFT HAND SIDE OF NORTH ELEV. - RT SIDE WEST ELEV. - SHALL DETERMINE IF THEY ARE NEG. WHEN BID ARE RECEIVED
ALTERNATE ON STOMP BASE - RUN BRICK TO FOOTING.
ALTERNATE ON ALL ROW LOCK COURSE - OMIT
Note: Bldg. Code req.
① Plywood paneling to have 1/2" dry wall backing
② Exposed interior wood to be treated with fire resistant paint.
③ Plans to be revised further as per agreement of 6/25/65
④ All part 1/2" dry wall 2 sides


EAST ELEVATION
SCALE 1/4" = 1'-0"
NORTH ELEVATION
1/4" = 1'-0"
NOTE:


B B CROSS SECTION THRU CHANCEL NORTH COURT ELEV
NORTH ELEV VEST.
WEST ELEV. VESTIBULE
NORTH MEN'S RM
WEST W. RM
SOUTH WOMENS RM
SOUTH ELEV. VEST
EAST ELEV. VESTIBULE
SOUTH MEN'S RM.
EAST W. RM.
NORTH WOMENS RM
NOTE: OMIT CERAMIC TILE IN MEN'S & WOMEN'S RM. USE ENDRY PAINT
V O I D DETAIL
"A" DETAIL OF PANEL WALL
A-A CROSS SECTION SOUTH COURT ELEV
CRIB RM. WINDOW


METAL CROSS
SPUN METAL BALL
METAL COVER SOLDER ALL JOINTS
FLAT SEAM (TYP.)
STANDING SEAM
SECTION
STEEPLE DETAIL
NOTE: SEGREGATE COST OF STEEPLE (LIGHTS - MATERIAL & LABOR) I SHALL DECIDE IF IT WILL BE NO. 6, WHEN BIDS ARE RECEIVED

# First Service: December 12, 1965





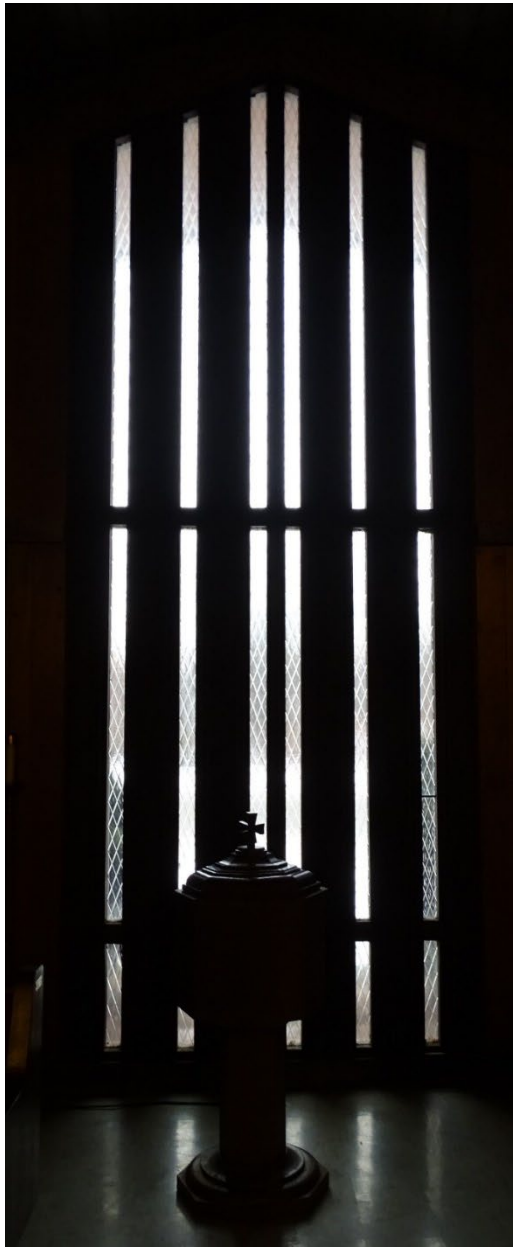

Advent Evangelical Lutheran Church
Saved by Grace Alone
SUNDAY WORSHIP 10:00 AM

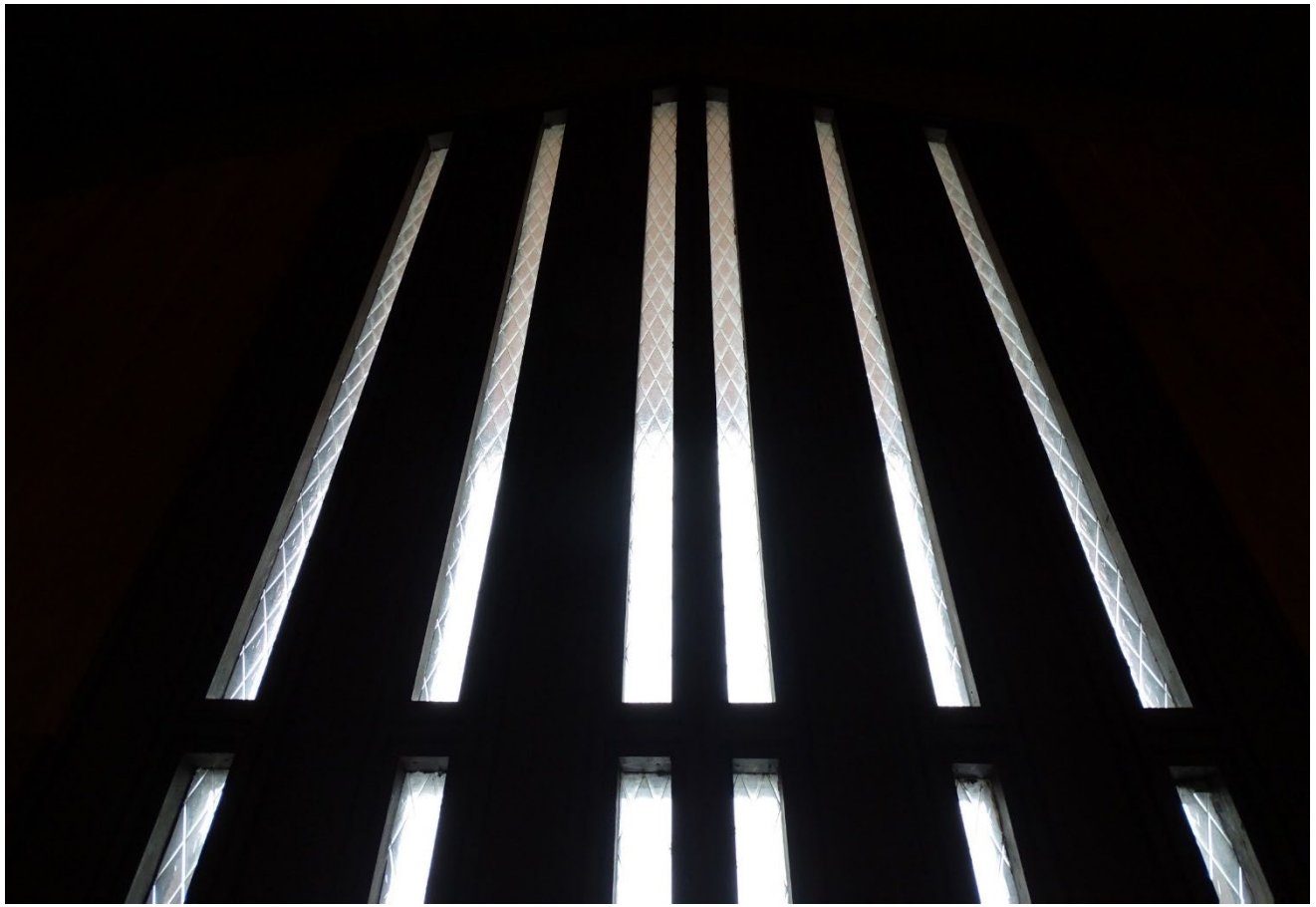




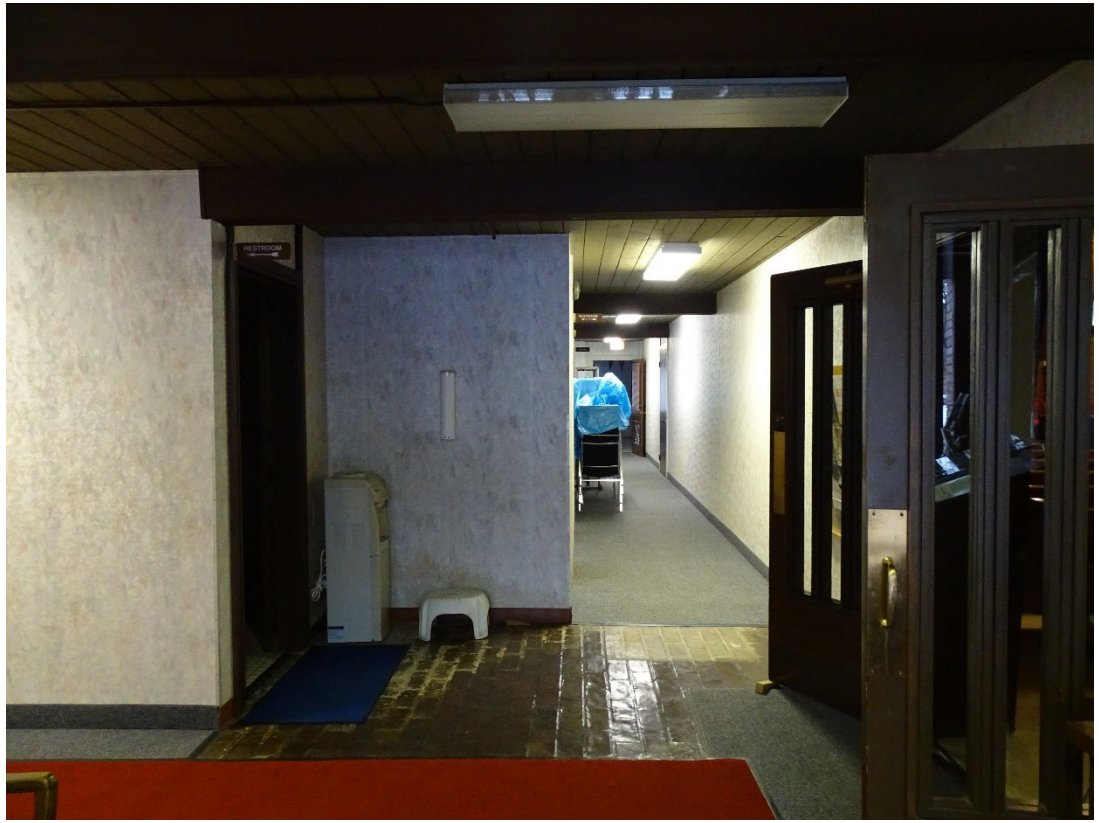











RESTROOM






SING
PRAISES
GIVE
THANKS





















# Significance

- Its character, interest or value is part of the development, heritage or cultural characteristics of the City, State or the United States.
- Its identification is with a person who significantly contributed to the culture and development of the City.
- The historic property exemplifies the cultural, economic, social or historic heritage of the City.
- The historic property is identified with the work of a master builder, designer, architect, engineer or landscape architect whose work has influenced the development of the area, community, state or nation.
- The historic property embodies elements of architectural design, detail, materials, or craftsmanship which represent a significant architectural innovation.
- The historic property relates to other distinctive areas which are eligible for preservation activities, based on a historic, cultural, or architectural motif.
- The historic property's location or its singular physical characteristics represent the establishment or are a familiar visual feature of a neighborhood, community or City.

# Thank you

# Cleveland Landmarks Commission

## Administrative Reports

March 24, 2022

# Cleveland Landmarks Commission

## Adjournment

March 24, 2022

# Cleveland Landmarks Commission

March 24, 2022