

STAFF REPORT: 04-15-2020 MEETING
APPLICATION NUMBER: 20-6682
ADDRESS: 329 W. GRAND BLVD.
HISTORIC DISTRICT: HUBBARD FARMS
APPLICANT: JOSH MADDOX
PROPERTY OWNER: SOUTHWEST DETROIT IMMIGRANT AND REFUGEE CENTER
DATE OF COMPLETED APPLICATION: 3-23-2020

PREPARED BY: B. CAGNEY



Front façade, Applicant Photo

Existing Conditions

329 W. Grand Blvd. is a 2.5-story, single-family home built in 1900. It is located mid-block on a tight, residential section of Grand Boulevard between the I-75 service drive and Porter Street. It is a wood framed home, with lapped wood siding, a hipped roof, and centrally located dormers. The home has experienced a long period of neglect, staff records indicate that the home was petitioned for demolition back in 2004, at which time records indicate that there was a dangerous building complaint issued by BSEED. While the proposal for demolition was denied at that time, BSEED has since noted dangerous building complaints in 2010 and 2019. However, in June of 2019, HDC staff issued a COA for the replacement of the asphalt shingle roof and this work was recently completed.

The front porch was removed at an unknown date, prior to 2009. **Additionally, the remaining windows have not been removed and boarded up show severe deterioration.** The doors have been replaced with non-historic metal doors. **Photos indicate that the wood siding on the home is now warped, split broken and in some areas, missing.** The applicant states the interior of the home was gutted at an unknown date, including partial demolition of

the large wood staircase at the front and the secondary staircase at the rear. Staff is unable to access designation photos for this property.



Rear façade, Applicant Photo

With the current proposal, the applicant is seeking the Commission's approval for the following specific scope items:

- **Exterior Work- All Sides**
 - Remove existing wood siding and sheathing; **Install new *Hardie Artisan Lap Siding* over new plywood sheathing and weather barrier.**
 - **5.25" / 4" Exposure, 5/8" thickness, smooth texture**
 - **Painted B:3 Light Yellow (Color Chart B)**
 - **Installed with mitered corners**
 - Install new fascia and soffit, profiles to match existing
 - **Painted B:16 Dark Garyish Olive (Color Chart B)**
 - Install new 5" aluminum K-Style gutters and downspouts at all eaves
 - Painted to match adjacent wood trim
 - **Install new, double-hung, aluminum-clad wood windows to match existing openings**
 - ***Andersen 400 Series w/ simulated divided lite on upper sash***
 - Muntin pattern to be determined, exterior application of muntins unknown
 - Sash Color Black, Trim Color B:16 Dark Garyish Olive (Color Chart B)
 - Install 3.5" flat wood trim around all windows
- **Exterior Work- Front Façade (East)**
 - **Construct new, brick front porch, approx. 18' x 10' with wooden canopy**
 - Brickwork extends 1'-8" from landing, finished with 4" stone cap
 - 1'-6" Black metal railing installed to cap along front and sides
 - Steps to include concrete treads and landing
 - Black handrails installed on both sides of steps

- Five tapered, Doric style columns, wooden, painted B:16 Dark Grayish Olive (Color System B)
 - Proposed Canopy Roof to be clad in grey asphalt shingles to match existing
 - Hipped style with low pitch
 - Fascia and trim to be painted B:16 Darky Grayish Olive (Color Chart B)
 - Infill one (1) existing basement window with brick to match adjacent brick
 - Replace one (1) basement windows with glass block
 - Install one (1) exterior light sconce, lantern style (*Allen + Roth*) with rubbed bronze finish
 - Install fourteen (14) double-hung aluminum clad wood windows, as detailed above
 - Install one (1) new stained wood and glass entry doors
- **Exterior Work- Rear Façade (West)**
 - Construct new brick wheelchair ramp with concrete cap and black metal railing
 - Approx. 21' total run plus required landing space to meet ADA requirements
 - Construct new brick stairway with concrete treads
 - Black handrails installed on both sides of steps
 - Remove existing rear entry door, infill opening with wall construction to match existing.
 - Infill two (2) basement windows with brick to match adjacent brick
 - Create new rear entry doorway at existing rear window location.
 - Install new stained wood and glass entry door.
 - Install exterior light sconce, lantern style (*Allen + Roth*) with rubbed bronze finish.
 - Install seven (7) double-hung aluminum clad wood windows, as detailed above
 - Build new porch canopy over rear entry door. Style to match existing to be demolished.
 - Proposed Canopy Roof to be clad in grey asphalt shingles to match house
 - Wood bracket detail design to be similar to existing
 - Fascia and trim to be painted B:16 Darky Grayish Olive (Color Chart B)
- **Exterior Work- Sides (North)**
 - Install nine (9) double-hung aluminum clad wood windows, as detailed above
 - Replace four (4) basement windows with glass block
- **Exterior Work- Sides (South)**
 - Install fifteen (15) double-hung aluminum clad wood windows, as detailed above
 - Replace four (4) basement windows with glass block
- **Exterior Work -Site (Rear)**
 - Demolish existing parking pad and block retaining wall at rear of site
 - Build new concrete parking pad at rear of site w/ four (4) parking spaces
 - Construct new burnished block retaining wall with stone cap
 - Construct new concrete ramp from parking area to rear entry
 - Pour new concrete walkway
 - Install 5' tall black metal fence around sides and rear yard, extending 47' to rear face of house on South property line and 94' to front face of home on North property line
 - *Great Fence, Residential style 4*
 - Install 6' light pole w/ light globe *Signature Streetscapes Bostonian Series PB-1* w/ steel post, powdercoated black, installed as direct burial.
- **Exterior Work -Site (Front)**
 - Demolish existing site stair and concrete walk at front of site
 - Remove existing chain-link fence along front property line
 - Regrade earth along front property line

- Build new concrete stair with black metal guardrail,
- Construct new burnished block retaining wall stone cap, with new metal signage and brick site bench with stone cap
- Pour new concrete walk to front entry.

STAFF OBSERVATIONS & RESEARCH

- The rear of the house is not visible from the right-of-way
- The proposed ADA ramp conforms to HDC guidelines

ISSUES

- Staff finds that the aluminum clad wood, double-hung replacement windows, as proposed, are generally acceptable. However, a more detailed window should be considered. For instance, the window bay at the front of the house has proposed a double hung at the center opening. The proportion of a double hung window at this location seems a bit obtuse, staff feels as though a picture window with some type of decorative transom would be more appropriate at that location.
- Staff appreciates the applicant's proposal to clad the exterior with the Artisan Line of Hardie lap siding, which more closely approximates the original design. However, it is unclear if the applicant has considered replacing the wood siding with new wood siding instead of the Cementous-fiber board. Doing so may be cheaper and would be more appropriate under Secretary of the Interior's Standards Rehabilitation Standard 6 as an "in-kind" replacement.
- It is not clear in the application if the new fascia and soffits will be wood or if another material is proposed. Wood is also recommended here.

STAFF RECOMMENDATIONS

1. Window replacement: "All Windows"

The original windows of the home have been removed at a previous, unknown date. It is staff's opinion that the proposed aluminum clad wood windows are generally appropriate under Secretary of the Interior's Standards for Rehabilitation #9, *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.* The applicant has stated that they are willing to install simulated divided lite grills on the upper portion of some of the windows. However, such divided light patterns would be conjectural and potentially detract from the property's historic character. Staff would request that the Commission allow the applicant to revise some aspects of the window proposal and resubmit to staff for approval. Some of the proposed double hung at some of the wider window openings might have other options are more appropriate. Additionally, glass block windows must conform to HDC guidelines.

2. Siding Replacement

It appears based on the photos provided by the applicant that substantial areas of wood siding have deteriorated beyond repair. However, staff does have concerns about the appropriateness of Hardie

siding to replicate wood siding. Staff recognizes that the applicant has selected the Hardie Artisan line of product, which is a thicker product than traditional Hardie siding that creates more definition and can be installed with mitered corners. However, staff feels that the replacement of the existing wood siding with new wood siding, would be more appropriate to satisfy Standard 6 of the Secretary of the Interior's Standards for Rehab, *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

3. Front Façade, Rear Façade and Sitework

In general, staff finds most of the rehabilitation work for the home appropriate: New aluminum gutters as proposed, replacement of wood soffit and fascia boards to match existing, as well as the exterior lighting selection. The proposed porch replacement at the front of the home as well as the modification of the location of the rear door does not detract from the historic character of the house. The proposed wheelchair ramp conforms to HDC Resolution 18-04. The changes to the site as proposed is appropriate based on the Secretary of the Interior's Standards for Rehab 2) *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided;* 6) *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence;* and 9) *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment....* With the condition that "The installation of concrete hardscape within local historic districts under the condition that it is not "bright white." Specifically, such concrete must be composed of an exposed aggregate, tinted grey, or finished with a clear or tinted grey curing compound," to correspond with HDC Resolution 16-06.

4. Paint Home in accordance to Color Chart B.

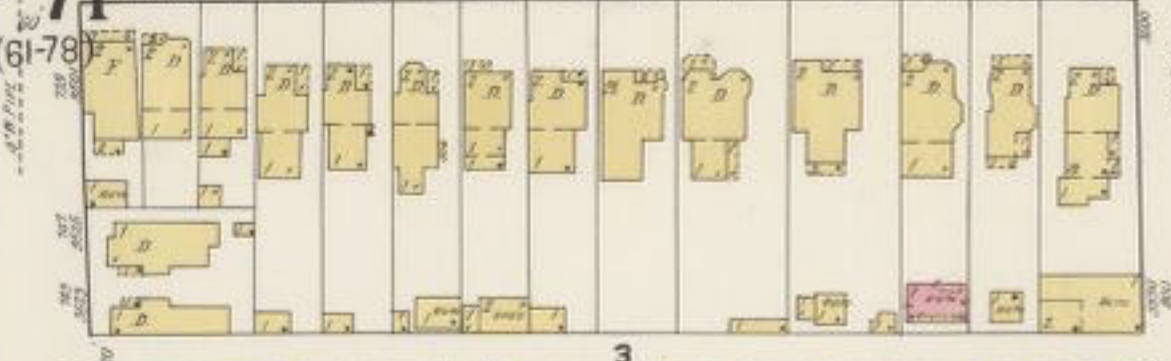
The applicant has submitted color proposals based off HDC Color Chart B. The home is listed in HDC data bases as Prairie style architecture, which would correspond to Color Chart E. The proposed siding color, A:3 Light Yellow is on both charts, B:16, Light Grayish Olive is not on Color Chart E. However, it is staff's opinion that this aspect of the proposal while a slight deviation from the associated Color Chart is still appropriate under the Secretary of the Interior's Standards for Rehabilitation, 2) *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided* and 9) *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*

(3448)
25th Street Map No. 10

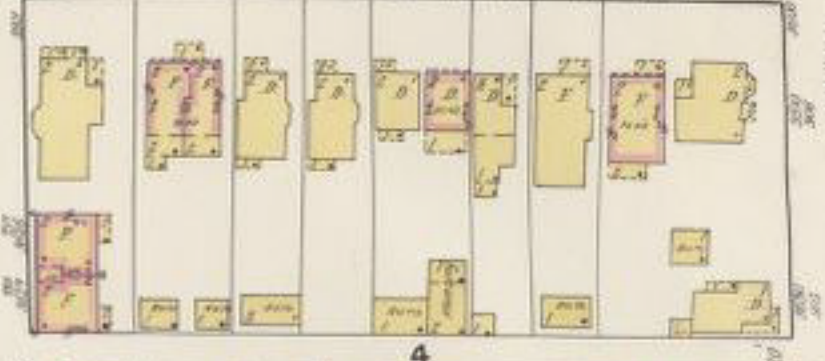
24TH ST. 59

71

(61-78)



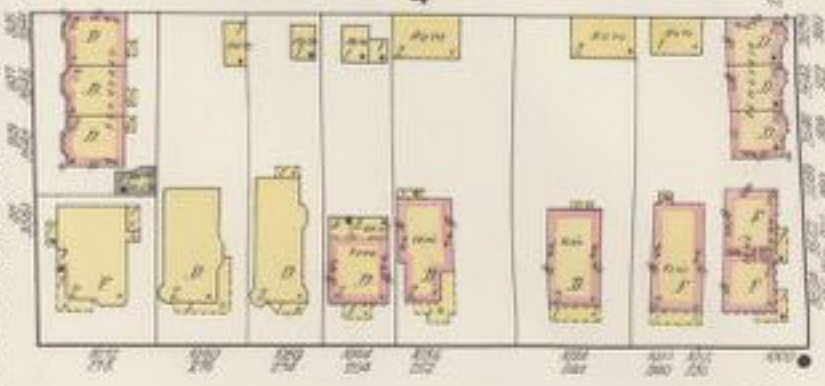
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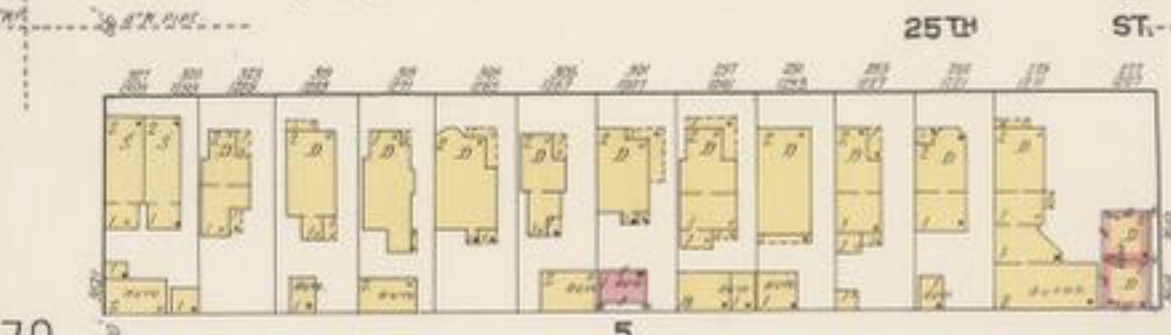
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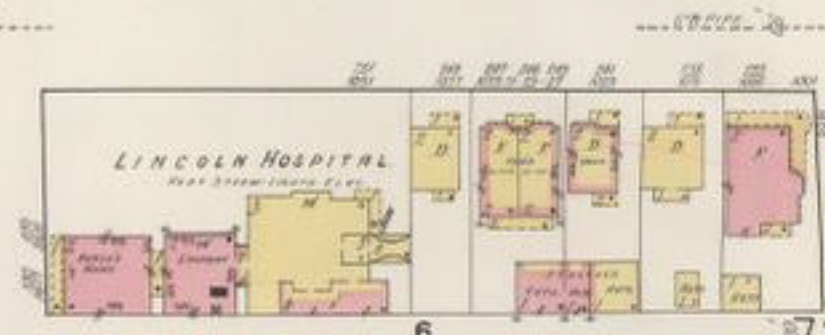
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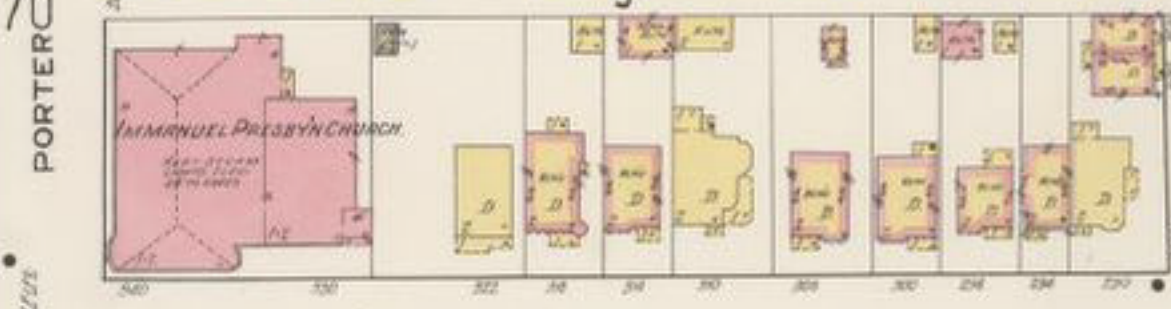


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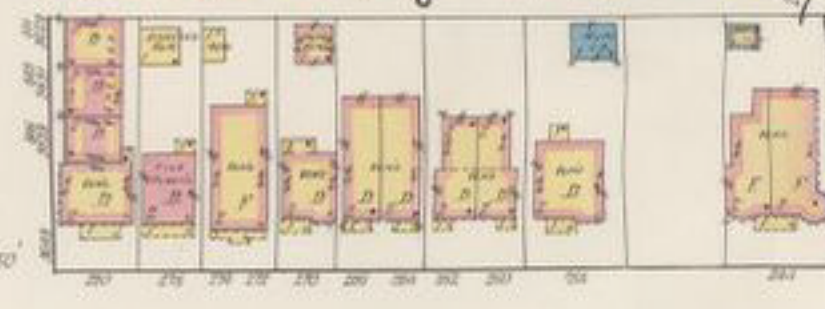
LINCOLN HOSPITAL

6



IMMORTEL PRESBYTERIAN CHURCH

5



6



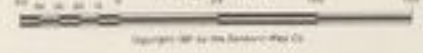
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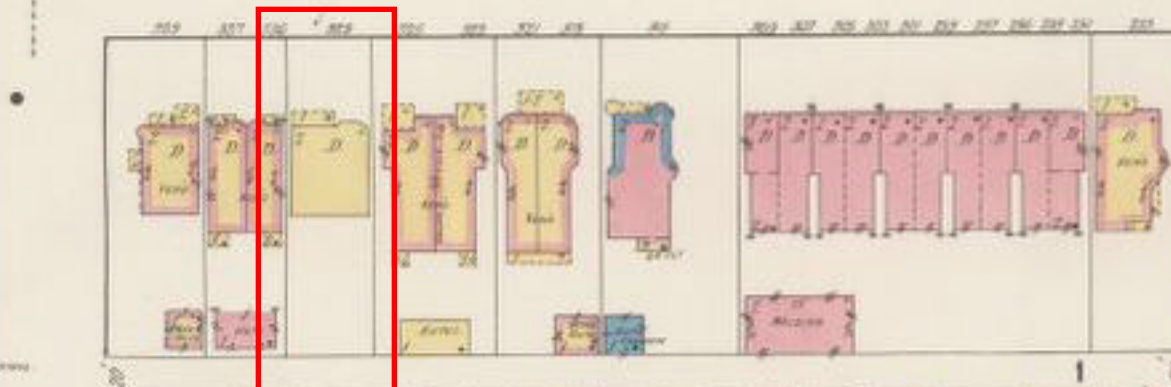
W. GRAND BLVD

Scale of Feet

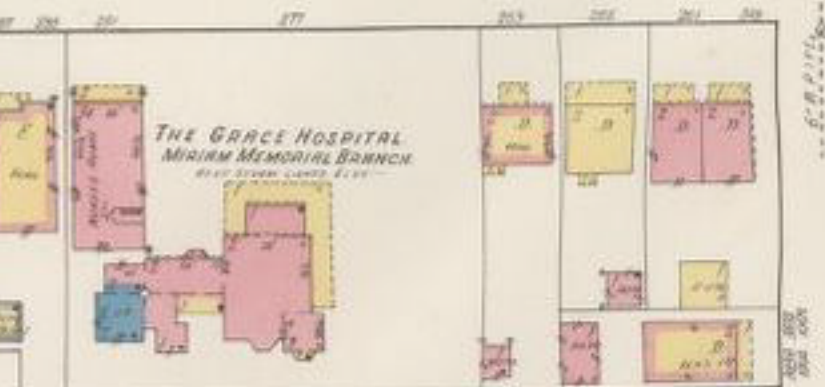


70 PORTERO

72 LAFAYETTE BLVD

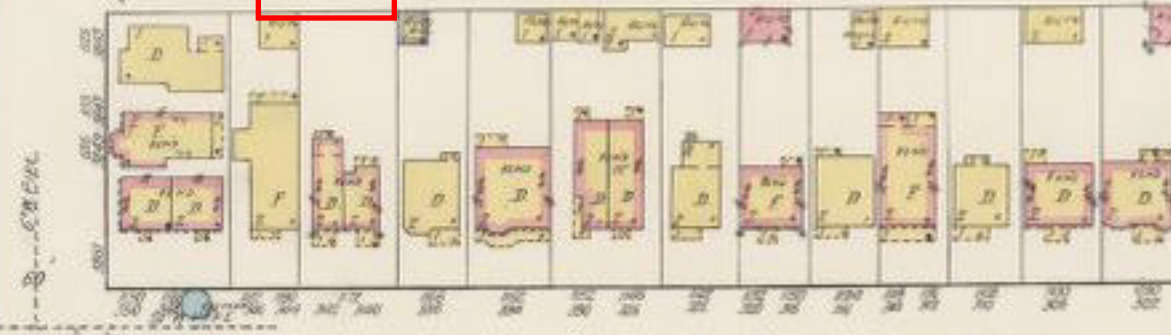


1



THE GRACE HOSPITAL
MIRIAM MEMORIAL BRANCH

1



1



1

78 VINEWOOD AV.

82

This feature has a color
Legend and the correct
Scale of Feet



January 28, 2020

RE: 329 W. Grand Boulevard Exterior Renovation, Historic District Commission Submission

Description of Existing Conditions

329 W. Grand Boulevard is an existing three-story wood-framed wood-sided home in the Hubbard Farms Historic District. At some point prior to this project, the interior of the house was gutted, including partial demolition of the large wood stairway at the front of the house that leads from the ground floor to second floor, and the servants stair at the rear of the house that leads from the basement to the third floor/attic. In addition, all windows have been removed and boarded, and front and rear doors replaced with generic metal entry doors. The exterior of the house features wood siding that is in disrepair and needs replacement due to warped, split, broken, and large areas of missing boards. The original front porch is also completely missing. Prior to this project, the roof of the house has been replaced and appears to be in good condition.

Project Narrative

The project proposes to completely renovate the exterior of the building by replacing the existing siding with new painted HardiPlank Lap siding with a smooth finish and a 3" exposure to match the existing siding profile. New aluminum-clad exterior wood windows will be added, with 3" exterior wood trim, along with new wood and glass entry doors to be stained a complimentary natural color. Grillage will be included in the upper sashes of all windows as well as the front door. Grillage pattern to be recommended by HDC. New glass block windows will be added in existing basement window openings.

A new front porch will be constructed with a brick base with concrete stairs and porch floor with painted wood tapered circular columns and a simple wood lintel detail to support a wood framed roof canopy. The roof will feature a hip profile with asphalt shingles to match what is existing on the house. Wood elements of the porch will be painted to match the other wood trim on the house. The brick knee walls of the porch will be built to 28" in height, including a 4" stone cap to match porch construction of similar nearby houses. To achieve the code required 3'-6" railing height, a black powder coated steel railing 1'-6" high will be built on top of the stone cap on all exposed sides of the porch, as well as a guardrail on each side of the stairs, inboard of the brick wing walls. The goal is for the porch to blend with the existing character of the house, and the additional code related elements to be expressed as delicate interventions that visually recede when viewing the house.

A new stair and ramp complex will be added to the rear of the house to provide an accessible entry and exit. The existing rear door will be removed and infilled to match adjacent wall construction. A window at the north side of the rear elevation will be cut to accommodate the new entry door at the Ground Floor elevation. The new stair and ramp will have a brick base with concrete walking surfaces and black metal railings to match the infill components at the front porch. The canopy of the existing rear entrance will be demolished, and a new similar canopy will be constructed over the new door.

A concrete site ramp will be constructed from a new parking pad at the rear of the site to the new stair/ramp complex at the rear of the house. The site ramp will include a black painted handrail with loop ends.

At the front property line of the site, the existing stair will be demolished, and earth regraded to incorporate a new concrete stair with black metal railings, and a burnished block retaining wall. Between the existing sidewalk and retaining wall will be a new at-grade planting bed and a brick site bench with a stone cap. The retaining wall behind the planting area will feature new signage for the property consisting of 6" high, 1/2" deep extruded metal letters mounted on standoffs to the block. The metal letters will have a brushed steel finish.

Inside the house, both wood stairs will be rebuilt. The rear stair will provide access to all levels from the basement to attic, and the front stair will provide access from ground level to attic.

March 20, 2020

RE: 329 W. Grand Boulevard Exterior Renovation, Historic District Commission Submission

Scope of Work

1. Site Work

- a. Demolish existing parking pad and block retaining wall at rear of site
- b. Demolish existing site stair and concrete walk at front of site
- c. Remove existing chain-link fence along front property line
- d. Build new concrete parking pad at rear of site with new burnished block retaining wall with stone cap.
- e. Regrade earth along front property line and build new concrete stair with black metal guardrail, new burnished block retaining wall stone cap, with new metal signage and brick site bench with stone cap.
- f. Build new concrete walk to front entry.
- g. Build new concrete site ramp with painted metal pipe handrail from parking pad to rear entry.
- h. New light poles with historic-styled globe lights (at front and rear walkways)
- i. New black metal fence along rear portion of side property lines and along east side of parking pad.

2. Exterior Work

- a. Remove existing wood siding and sheathing.
- b. Infill basement windows as required (refer to plans).
- c. Remove existing rear entry door, infill opening with wall construction to match existing.
- d. Create new rear entry doorway at existing rear window location (refer to plans).
- e. Install new HardiPlank Lap siding over new plywood sheathing and weather barrier.
- f. Install new aluminum-clad wood windows
- g. Install new glass block windows at basement
- h. Install new trim and soffits. Profiles to match existing
- i. Install new K-style metal gutters on all eaves. Paint to match adjacent trim color.
- j. Build new brick front porch with wood columns and canopy with black metal guardrail infill as indicated on elevations.
- k. Build new brick and concrete rear porch with stair and ADA ramp with black metal railings.
- l. Install new porch light, front and rear.
- m. Build new porch canopy over rear entry door. Style to match existing to be demolished.
- n. New stained wood and glass entry doors.

3. Interior Work

- a. Rebuild portion of first floor framing and subfloor that is currently unfinished.
- b. Remove remaining portions of partially demolished front and rear stairs.
- c. Rebuild front and rear wood stairs (refer to plans).

4545

architecture

January 28, 2020

RE: 329 W. Grand Boulevard Exterior Renovation, Historic District Commission Submission

Existing Photos



Existing Front (East) Elevation

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Existing Side (South) Elevation



Existing Rear (West) Elevation

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Existing Side (North) Elevation

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architecture

Detail Photos



Existing Parking Pad, Rear (West) edge of site.



Typical Wood Siding and Sheathing Condition



Typical Wood Siding and Sheathing Condition





Southwest Detroit
Immigrant and Refugee
Center

COLOR SYSTEM B

ACCEPTABLE COLOR COMBINATIONS *MS = MUNSELL STANDARD

BODY	TRIM	SASH	CORNICE/ PORCH	IRON CRESTING
Any System B Color EXCEPT A:7, A:8, A:9, B:19	Any System B Color	Match trim color or A:9, B:12, B:18, B:19	Match trim color or stone detailing	A:8, B:8, B:11 or B:19
Shingles: Stained or painted any System B Color ESPECIALLY Dark Greens, Olives, Browns and Yellows EXCEPT A:7, A:8, B:19	Any System B Color	Match trim color or A:9, B:12, B:18, B:19	Match trim color or stone detailing	A:8, B:8, B:11 or B:19
Existing brick or stone	Any System B Color darker than the brick or stone body, ESPECIALLY B:6, B:8, B:11, B:18	Match trim color or A:9, B:12, B:18, B:19	Match trim color or stone detailing	A:8, B:8, B:11 or B:19



B:7 Bluish Gray
MS: 10B 5/1



A:8 Blackish Green
MS: 2.5BG 2/2



A:9 Moderate Reddish Brown
MS: 7.5R 3/6



B:1 Light Yellowish Brown
MS: 10YR 6/4



B:2 Dark Yellow
MS: 5Y 6/6



B:3 Light Yellow
MS: 2.5Y 8/6

SIDING



B:4 Moderate Yellow
MS: 2.5Y 7/6



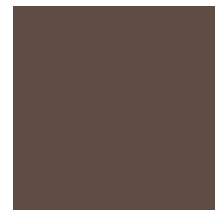
B:5 Light Brown
MS: 7.5YR 5/4



B:6 Moderate Brown
MS: 7.5YR 4/4



B:7 Moderate Yellowish Brown
MS: 10YR 5/4



B:8 Grayish Brown
MS: 5YR 3/2



B:9 Moderate Yellow Green
MS: 2.5GY 6/4



B:10 Grayish Green
MS: 10G 5/2



B:11 Grayish Olive Green
MS: 5GY 4/2

TRIM



B:12 Grayish Green
MS: 10G 4/2



B:13 Moderate Olive Brown
MS: 2.5Y 4/4



B:14 Dark Grayish Olive
MS: 10Y 2/2



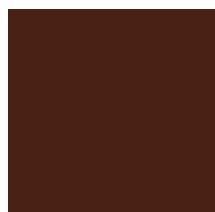
B:15 Dark Grayish Yellow
MS: 5Y 6/4



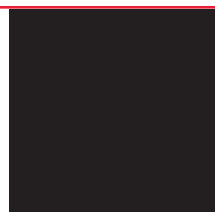
B:16 Light Grayish Olive
MS: 7.5Y 6/2



B:17 Light Olive
MS: 10Y 5/4



B:18 Dark Reddish Brown
MS: 2.5YRG 2/4



B:19 Black
MS: N 0.5/

WINDOW SASH

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SOUTHWEST DETROIT IMMIGRANT AND REFUGEE CENTER

329 W. GRAND BLVD DETROIT, MI 48216

ARCHITECT
4545 ARCHITECTURE | DESIGN
3011 W. GRAND BLVD
SUITE 400
DETROIT, MI 48202

PROJECT DATA

BUILDING CODE AUTHORITY:

APPLICABLE CODES:

BUILDING CODE
ALSO KNOWN AS THE "MICHIGAN BUILDING CODE"
2015 MICHIGAN BUILDING CODE (MBC) AS AMENDED

MECHANICAL CODE
ALSO KNOWN AS THE "MICHIGAN MECHANICAL CODE"
2015 MICHIGAN MECHANICAL CODE AS AMENDED

PLUMBING CODE
ALSO KNOWN AS THE "MICHIGAN PLUMBING CODE"
2015 MICHIGAN PLUMBING CODE AS AMENDED

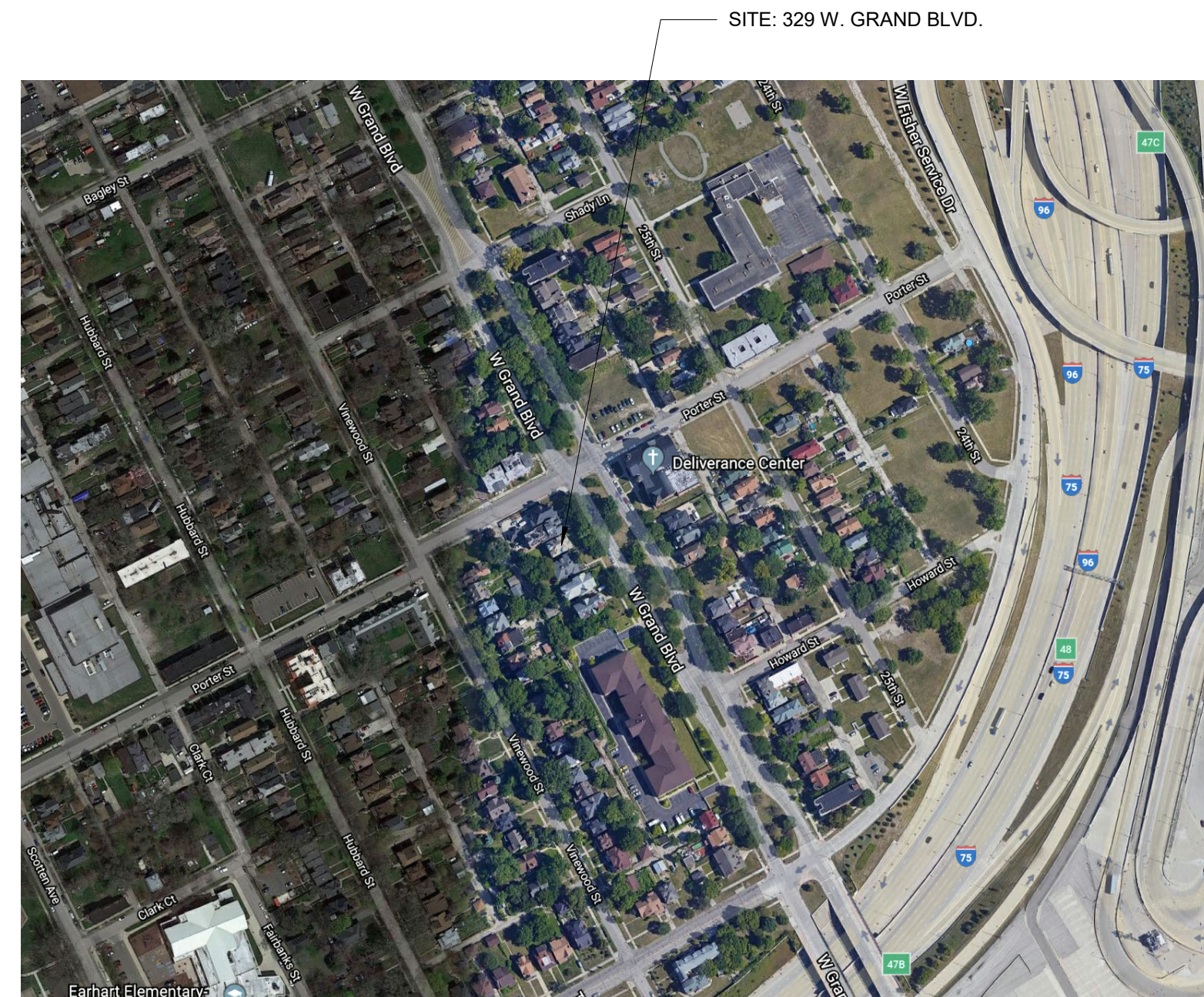
ELECTRICAL CODE
ALSO KNOWN AS THE "MICHIGAN ELECTRICAL CODE"
2014 NATIONAL ELECTRIC CODE (NEC) AS AMENDED &
MICHIGAN AMMENDMENTS PART 8.

ENERGY CODE
2015 UNIFORM ENERGY CODE

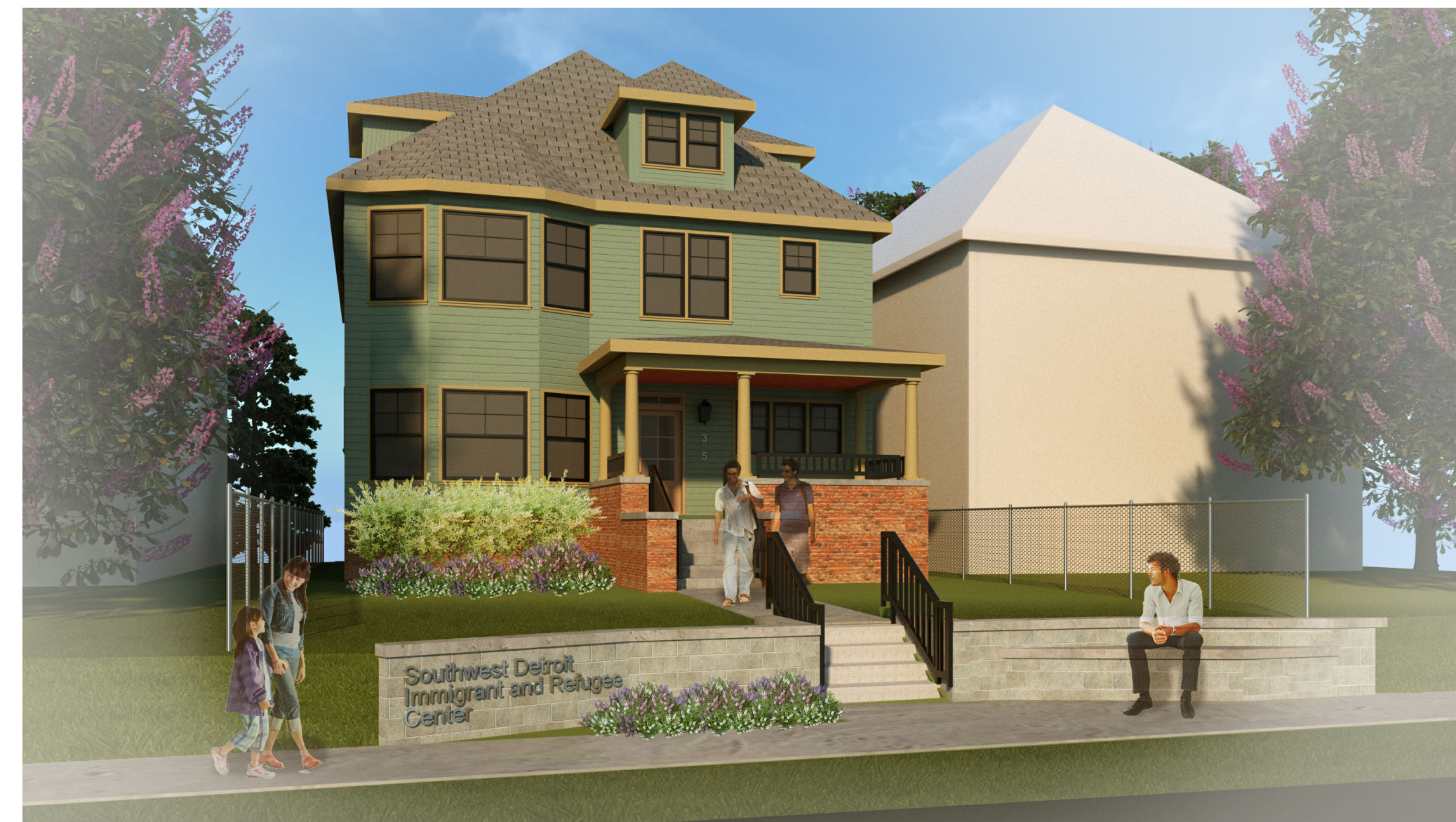
BARRIER FREE REQUIREMENTS
AMERICANS WITH DISABILITIES ACT (ADA)
MBC-2015, CHAPTER 11
ICC / ANSI 117.1 - 2010, EXCEPT SECTION 611 & 707

SHEET INDEX

TS1.1	TITLE SHEET
AD1.0	DEMOLITION SITE PLAN
AD1.1	DEMOLITION PLANS
AD3.1	EXTERIOR DEMOLITION WORK
A1.0	ARCHITECTURAL SITE PLAN
A1.1	FLOOR PLANS
A1.2	FLOOR PLANS
A3.1	EXTERIOR ELEVATIONS
A3.2	EXTERIOR ELEVATIONS
A3.3	EXTERIOR PERSPECTIVE VIEWS



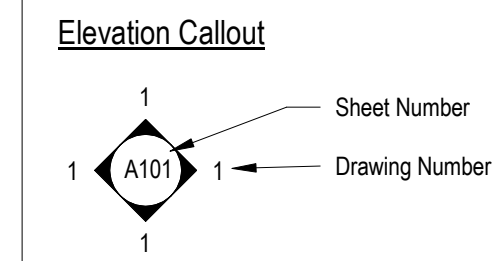
1 LOCATION PLAN



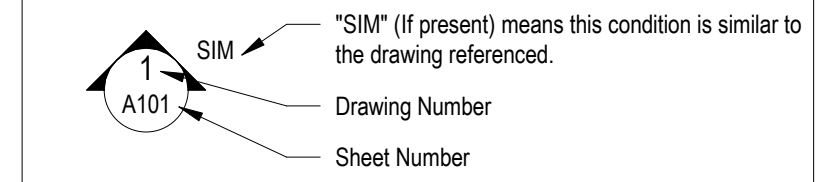
2 PROJECT IMAGE

SYMBOL LEGEND

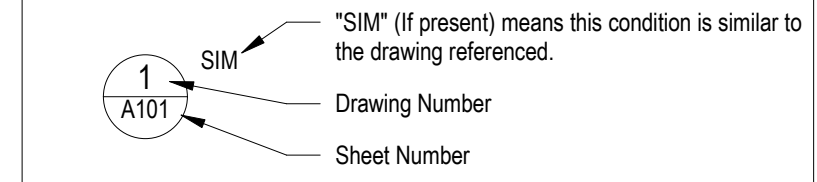
Drawing Navigation Symbols



Section Callout



Detail Callout



Other Symbols

Keynote Tag - refer to keynotes on that sheet

Wall Tag - refer to Wall Schedule

Door Tag - refer to Door Schedule

Window Tag - refer to Window Schedule

Name
Elevation

Floor Level Elevation

ABBREVIATIONS

@	ACOUST	Acoustical	At	Acoustic Ceiling Tile
ACT	Acoustic Ceiling Tile	ADJ	Adjacent	
AFF	Above Finish Floor	ALUM	Aluminum	
ANOD	Anodized	ANOD	Anodized	
BD	Board	BLDG	Building	
BLK	Block	BLKG	Blocking	
CEM	Cement	CJ	Control Joint	
CLG	Ceiling	CL	Centerline	
CO	Clean Out	COL	Column	
CONC	Concrete	CS	Corner Guard	
CONST	Construction	CONT	Continuous	
CORR	Corrugated	CPT	Carpet	
CT	Ceramic Tile	DET	Detail	
DIA	Diameter	DM	Dimension	
DN	Down	DO	Door Opening	
DR	Door	DWG	Drawing	
EA	Each	ELEV	Elevation	
EW	Each Way	EXG	Existing	
EXIST	Existing	EXP	Expansion, Exposed	
FD	Floor Drain	FDN	Foundation	
FRP	Fiber Reinforced Panels	FIN	Finish	
FLR	Floor	FLR	Face Of	
FO	Face Of	FOS	Face of Stud	
FR	Frame	FTG	Footing	
FV	Field Verify	GA	Gauge	
GALV	Galvanized	GYP	Gypsum	
HDW	Hardware	HMT	Hollow Metal	
HORIZ	Horizontal	HT	Height	
ID	Inside Diameter	INSUL	Insulation	
INT	Interior	JT	Joint	
LAV	Lavatory	LG	Long	
LLO	Long Leg Outstanding	LLO	Long Leg Outstanding	
LLV	Long Leg Vertical	MAX	Maximum	
MECH	Mechanical	MET	Metal	
MEZZ	Mezzanine	MI	Miscellaneous Iron	
MIN	Minimum	MISC	Miscellaneous	
MO	Masonry Opening	NIC	Not In Contract	
NTS	Not To Scale	OC	On Center	
OD	Outside Diameter	OPNG	Opening	
OPP	Opposite	PLG	Plate Glass	
PLS	Plate Steel	PLAM	Plastic Laminate	
PLAS	Plaster	PREFAB	Prefabricated	
PROJ	Project, Projection	PSF	Pounds per Square Foot	
PT	Paint, Point, Pressure Treated	R	Riser	
RA	Return Air	RB	Rubber Base	
RC	Roof Conductor	RCP	Reflected Ceiling Plan	
RD	Roof Drain	RF	Rubber Flooring	
REINF	Reinforced, Reinforcing	REQD	Required	
RFG	Roofing	RM	Room	
RS	Roof Sump	RT	Rubber Tile	
SAN	Sanitary	SCHED	Schedule	
SHT	Sheet	SIM	Similar	
SPEC	Specification	SS	Service Sink	
STL	Steel	STD	Standard	
STOR	Storage	STRUCT	Structural	
SUSP	Suspended	SW	Switch	
SYM	Symmetrical	T	Tread	
T&B	Top and Bottom	T&G	Tongue and Groove	
TEL	Telephone	THK	Thick, Thickness	
TERR	Terrazzo	THRESH	Threshold	
TYP	Typical	TOS	Top Of Steel	
UC	Undercut	UNO	Unless Noted Otherwise	
VB	Vinyl Base	VCT	Vinyl Composition Tile	
VIF	Verify in Field	W	Wide	
VERT	Vertical	WAINS	Weinscot	
WC	Water Closet	WD WIN	Wood Window	
WT	Weight	WWF	Welded Wire Fabric	

ARCHITECT:
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CONSULTANT:

Project :
**SOUTHWEST DETROIT
IMMIGRANT AND
REFUGEE CENTER**

Issued for :
HDC 01/28/2020

Drawn by :
JRM

Sheet Title :
TITLE SHEET

Project No. :
2019070

Sheet No. :

TS1.1

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CONSULTANT:

Project :
 SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER

Issued for :
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Drawn by :
 JRM

Sheet Title :
 DEMOLITION SITE
 PLAN

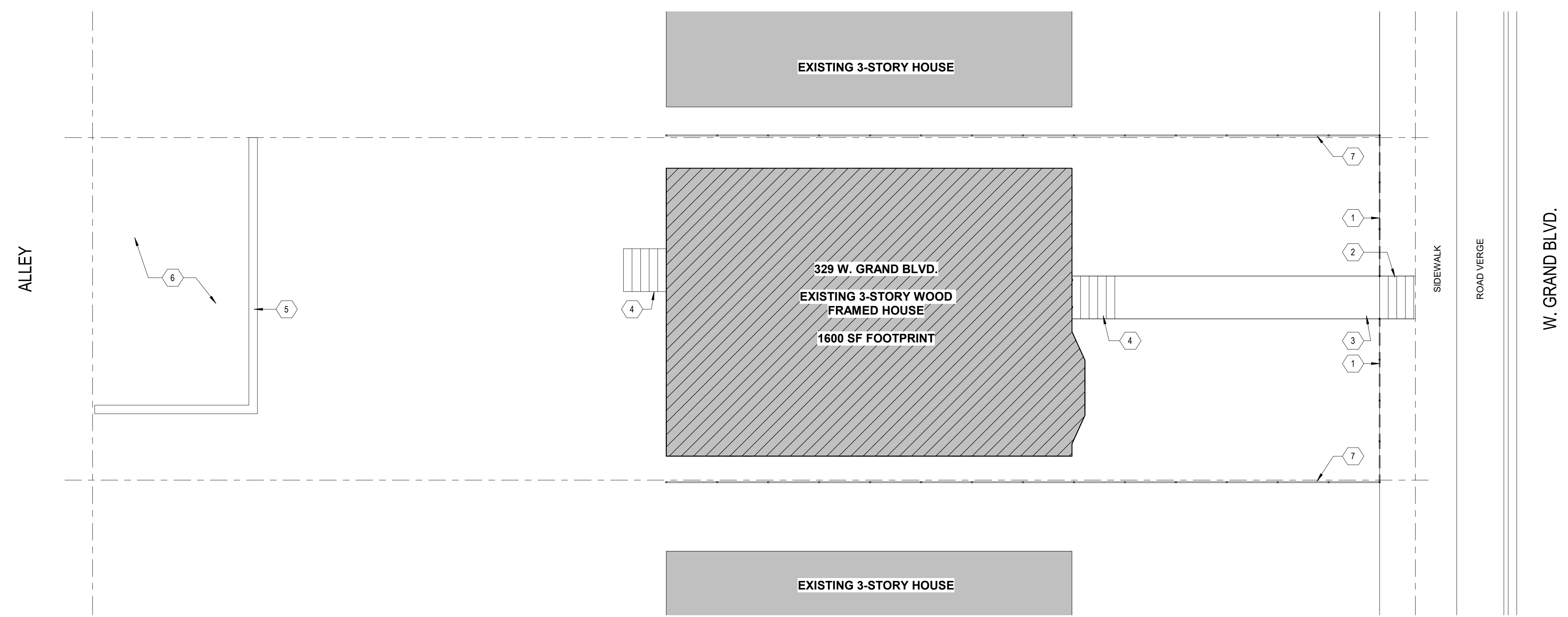
Project No. :
 2019070

Sheet No. :
AD1.0

DEMOLITION KEY NOTES:

(TYPICAL THIS SHEET ONLY)

- 1 REMOVE EXISTING CHAINLINK FENCE ALONG FRONT OF PROPERTY.
- 2 REMOVE EXISTING CONCRETE STAIR.
- 3 REMOVE CONCRETE WALK.
- 4 REMOVE TEMPORARY WOOD STAIRS.
- 5 DEMOLISH EXISTING CMU RETAINING WALL. PREPARE AREA FOR NEW RETAINING WALL.
- 6 DEMOLISH EXISTING CONCRETE PARKING PAD.
- 7 EXISTING CHAINLINK FENCE TO REMAIN.

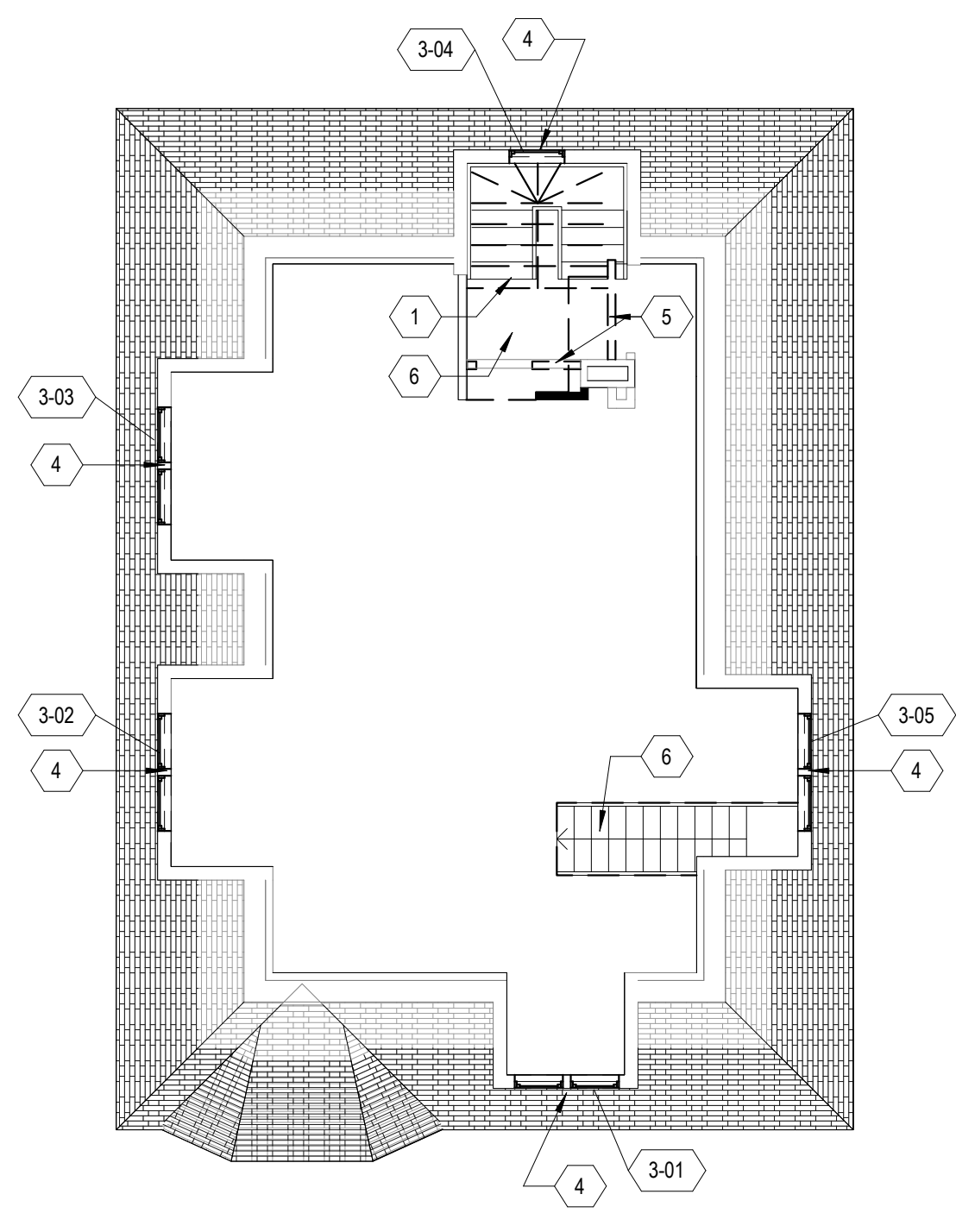


1 GROUND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

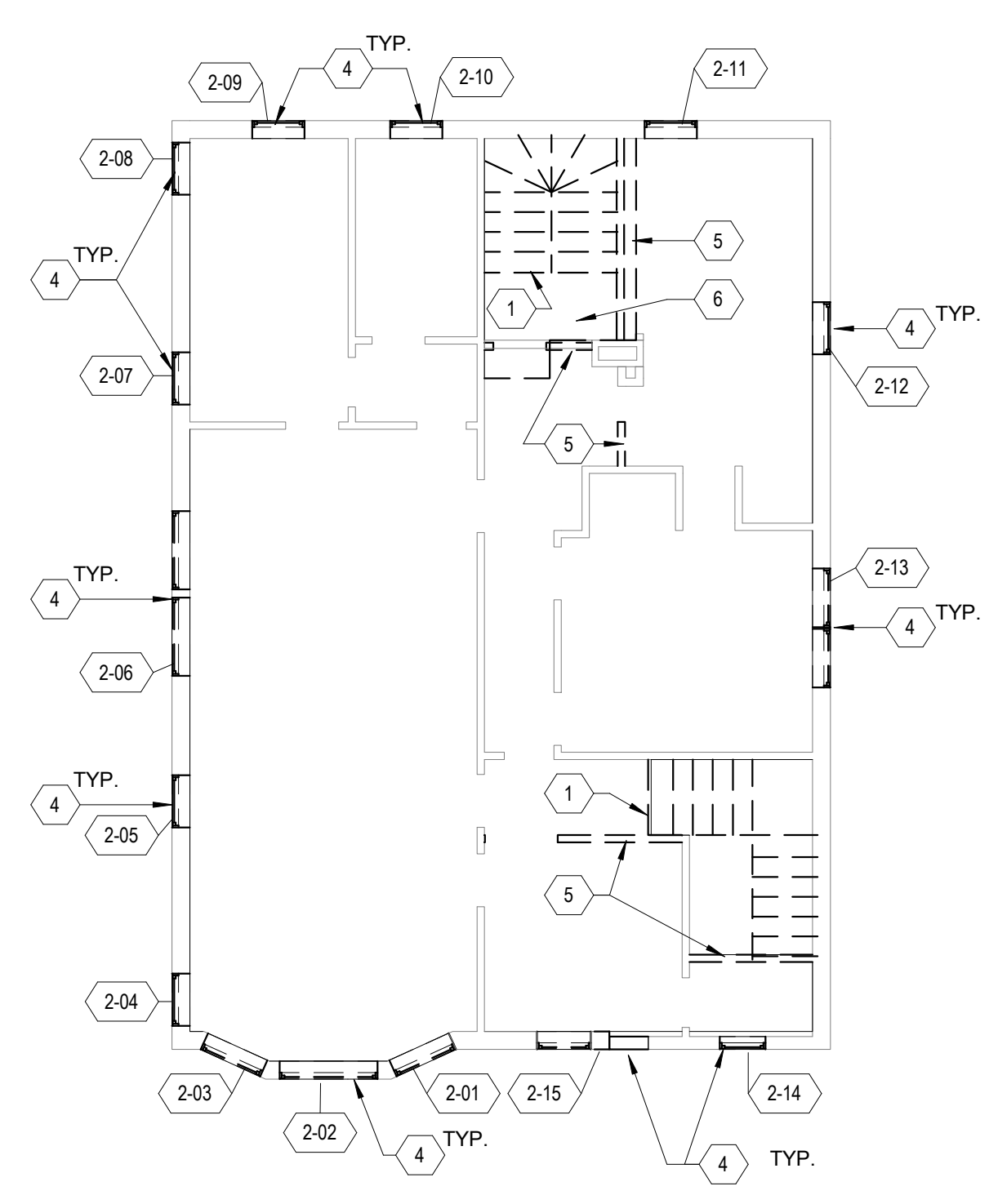
CONSULTANT:

DEMOLITION KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

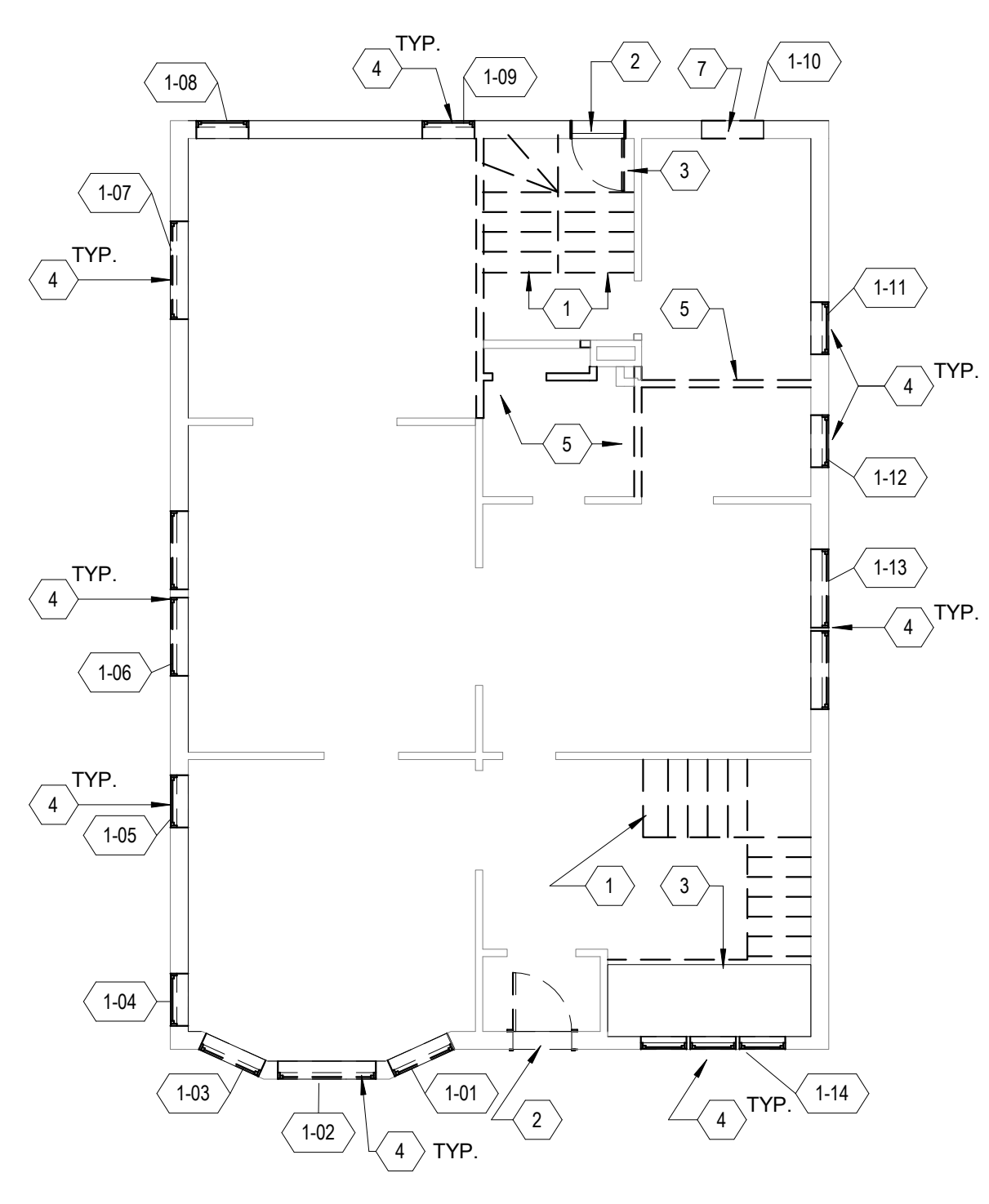
- 1 REMOVE EXISTING WOOD STAIR COMPLETE.
- 2 REMOVE EXISTING EXTERIOR DOOR
- 3 REMOVE WOOD LANDING AND ASSOCIATED FRAMING
- 4 PREPARE EXISTING WINDOW OPENING FOR NEW WINDOWS.
- 5 REMOVE PARTITION
- 6 REMOVE WOOD FLOOR AND FRAMING AS NECESSARY TO ACCOMMODATE NEW STAIR.
- 7 REMOVE EXISTING EXTERIOR WALL BELOW WINDOW SILL AND PREPARE OPENING FOR NEW EXTERIOR DOOR.



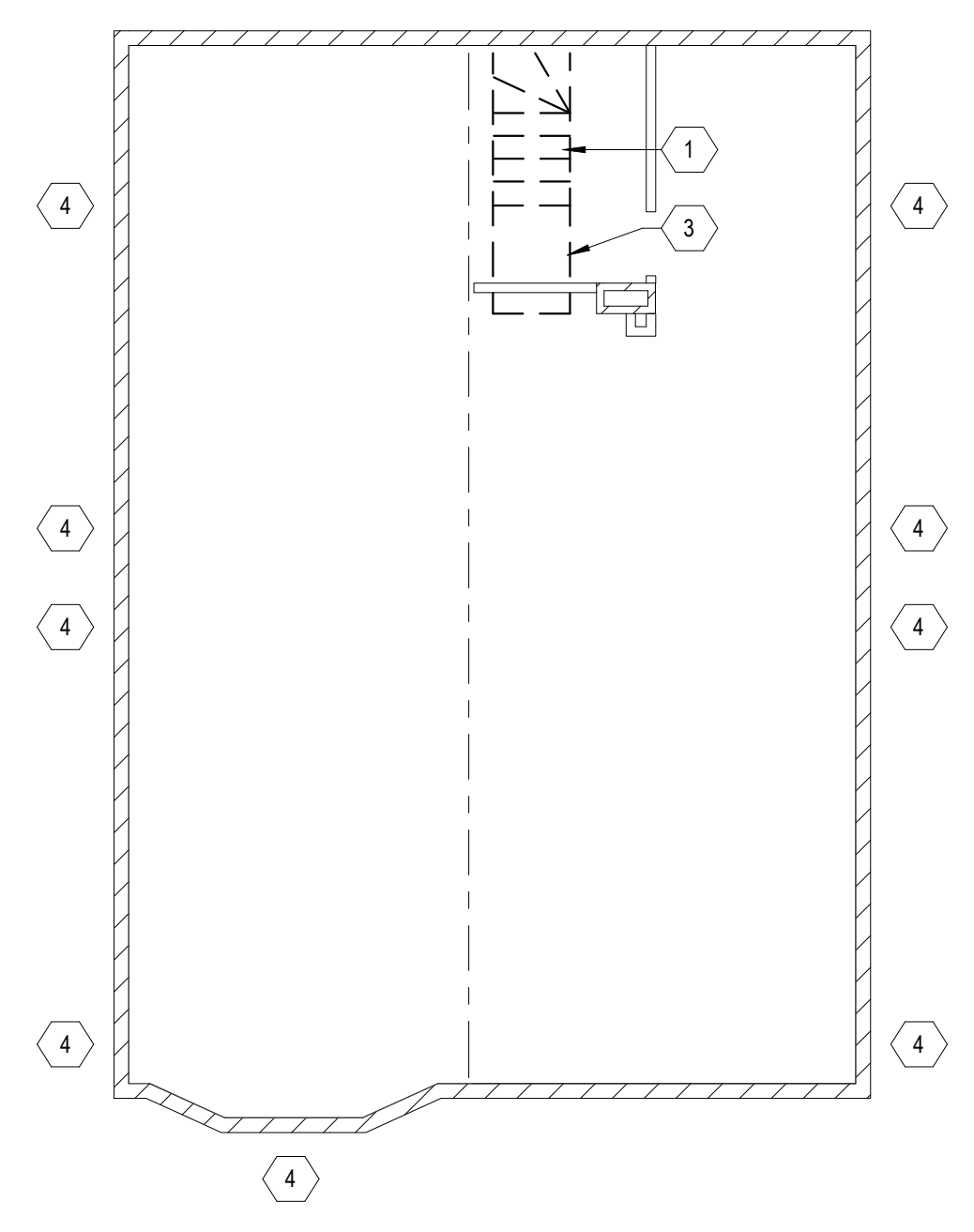
4 THIRD FLOOR DEMOLITION PLAN
 SCALE: 1/8" = 1'-0"



3 SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



2 GROUND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



1 BASEMENT FLOOR DEMOLITION PLAN
 SCALE: 1/8" = 1'-0"

Project :
 SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER

Issued for :
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Sheet Title :
 DEMOLITION PLANS

Project No. :
 2019070

Sheet No. :
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BINDER STRIP LOCATION

CONSULTANT:

GENERAL EXTERIOR DEMOLITION / REPAIR NOTES:

1. CONTRACTOR TO PERFORM ALL EXTERIOR MAINTENANCE REQUIRED USING SAME/SIMILAR MATERIAL TO PERSERVE EXISTING HISTORICAL DETAILS, FORMS, SHAPES, TRIM, AND COLORS
2. SURVEY TO BE PERFORMED OF EXTERIOR BRICK FACING AS TO ITS CONDITION AND MAKE ANY RECOMMENDATIONS FOR REPAIRS TO CONDITIONS IN NEED OF REPAIR.
3. COLOR AND/OR MATERIAL CHANGES MAY BE SUBJECT TO APPROVAL BY CITY HISTORIC COMMISSION.
4. CONTRACTOR TO REMOVE ALL EXISTING WOOD SIDING.
5. SURVEY TO BE PERFORMED OF ALL EXISTING WOOD TRIM, SOFFITS, AND FASCIAS TO DETERMINE EXTENT THAT CAN BE SALVAGED AND REPAIRED VS. REPLACED. ANY NEW WOOD TRIM TO BE OF SAME MATERIAL AND PROFILE TO PRESERVE EXISTING HISTORICAL DETAILS.
6. PREPARE ALL WINDOW OPENINGS FOR NEW WINDOWS.

EXTERIOR DEMOLITION KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 REMOVE EXISTING WOOD SIDING AND SHEATHING AS REQUIRED.
- 2 INFILL WINDOW OPENING WITH BRICK TO MATCH ADJACENT.
- 3 REMOVE EXISTING EXTERIOR DOOR
- 4 DEMOLISH EXISTING CANOPY ROOF
- 5 REMOVE EXISTING EXTERIOR WALL BELOW WINDOW SILL AND PREPARE OPENING FOR NEW EXTERIOR DOOR.

Project :
 SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER

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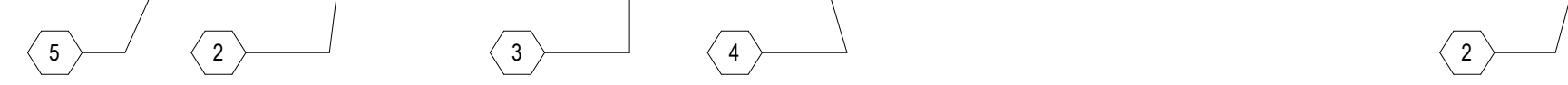
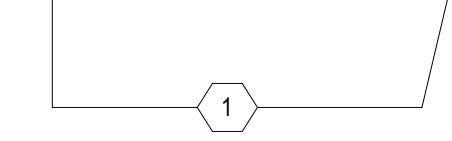
Drawn by :
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Sheet Title :
 EXTERIOR
 DEMOLITION WORK

Project No. :
 2019070

Sheet No. :

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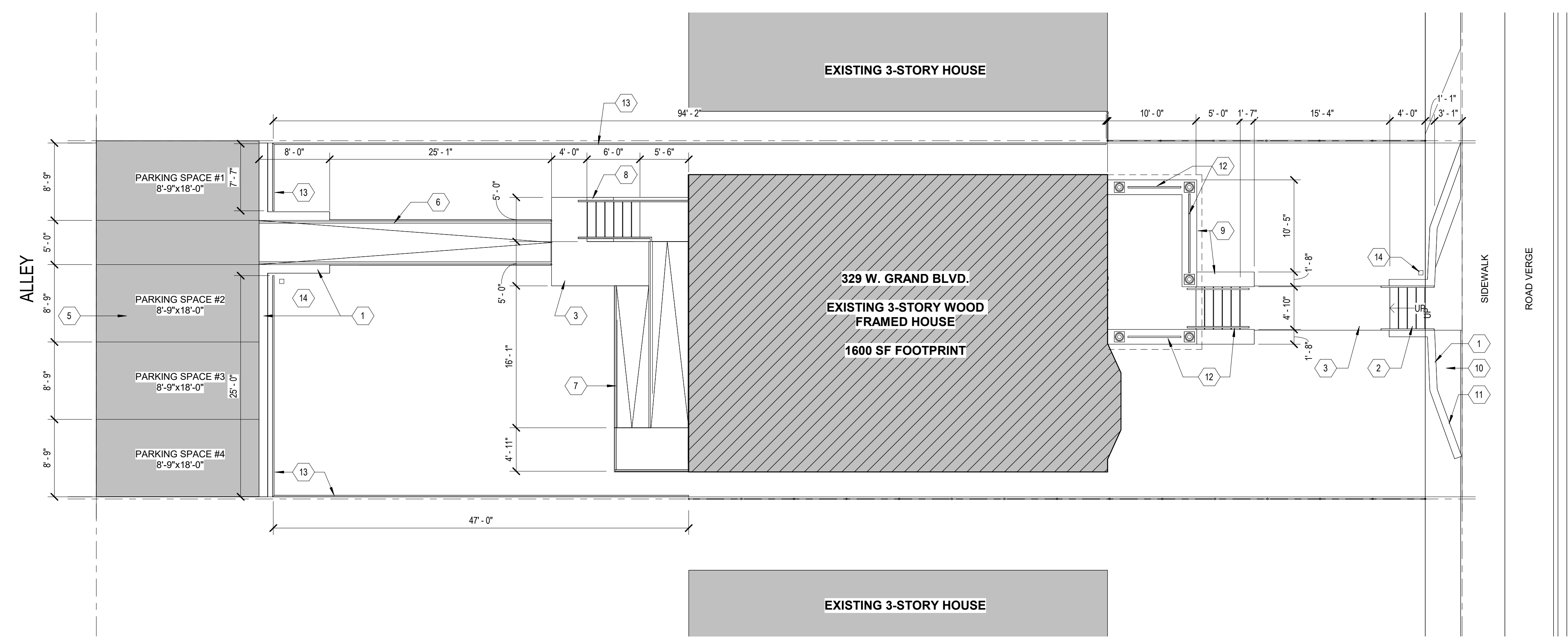
SENDER: STEEP LOCATION

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CONSULTANT:

SITE PLAN KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 NEW BURNISHED BLOCK RETAINING WALL
- 2 NEW CONCRETE SITE STAIR WITH BLACK METAL RAILING.
- 3 NEW CONCRETE WALK.
- 4 BURNISHED BLOCK SITE BENCH WITH STONE CAP.
- 5 NEW CONCRETE PARKING PAD.
- 6 NEW CONCRETE RAMP, WITH BLACK DOUBLE PIPE HANDRAIL WITH LOOP ENDS.
- 7 NEW BRICK WHEELCHAIR RAMP WITH CONCRETE TOP AND BLACK METAL RAILING.
- 8 NEW BRICK STAIR WITH CONCRETE TREADS AND LANDING AND BLACK METAL RAILING.
- 9 NEW BRICK PORCH AND STAIR WITH CONCRETE TREADS AND LANDING, ROUND WOOD COLUMNS, WOOD CANOPY WITH ASPHALT SHINGLE ROOF (SHINGLES TO MATCH EXISTING).
- 10 PLANTING AREA.
- 11 SITE SIGGAGE: BRUSHED METAL LETTERS ON STANDOFFS MOUNTED TO BURNISHED BLOCK.
- 12 PLACK METAL RAILING.
- 13 NEW BLACK METAL FENCE, 5' TALL, BASIS OF DESIGN: GREAT FENCE 'RESIDENTIAL-STYLE 4'
- 14 NEW LIGHT POLE, 6' TALL, LIGHT GLOBE BASIS OF DESIGN: SIGNATURE STREETSCAPES BOSTONIAN SERIES PB-1 STEEL POST, 3" DIAMETER, POWDERCOATED BLACK, DIRECT BURIAL INSTALLATION.



1 GROUND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

Project :
**SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER**

Issued for :
 HDC 03/20/2020

Drawn by :
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Sheet Title :
 ARCHITECTURAL SITE
 PLAN

Project No. :
 2019070

Sheet No. :

A1.0

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SENDER: SITE PLAN LOCATION

CONSULTANT:

FLOOR PLAN KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 NEW EXTERIOR WOOD ENTRY DOOR
- 2 NEW ALUMINUM CLAD WOOD WINDOWS
 BASIS OF DESIGN: ANDERSEN 400 SERIES
 3.5" EXTERIOR FLAT WOOD TRIM
 SIMULATED DIVIDED LIGHT, UPPER SASH (PATTERN TBD)
 SASH COLOR: BLACK
 TRIM COLOR: B-16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
 WINDOW SIZE TO MATCH EXISTING OPENING.
- 3 NEW WOOD STAIR WITH WOOD TREADS, RISERS, GUARDRAIL AND HANDRAIL.
- 4 NEW 2x10 WOOD FLOOR JOISTS WITH 3/4" PLYWOOD SUBFLOOR.
- 5 NEW INTERIOR PARTITION. 2x4 WOOD STUDS WITH 1/2" GYP. BD. EACH SIDE.
- 6 NEW 2x10 WOOD FLOOR JOISTS WITH 3/4" PLYWOOD SUBFLOOR.
- 7 NEW GLASS BLOCK WINDOWS.
- 8 NEW INTERIOR WOOD DOOR.
- 9 INFILL DOOR OR WINDOW OPENING WITH WOOD FRAME WALL AND/OR BRICK TO MATCH ADJACENT.

Project :
 SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER

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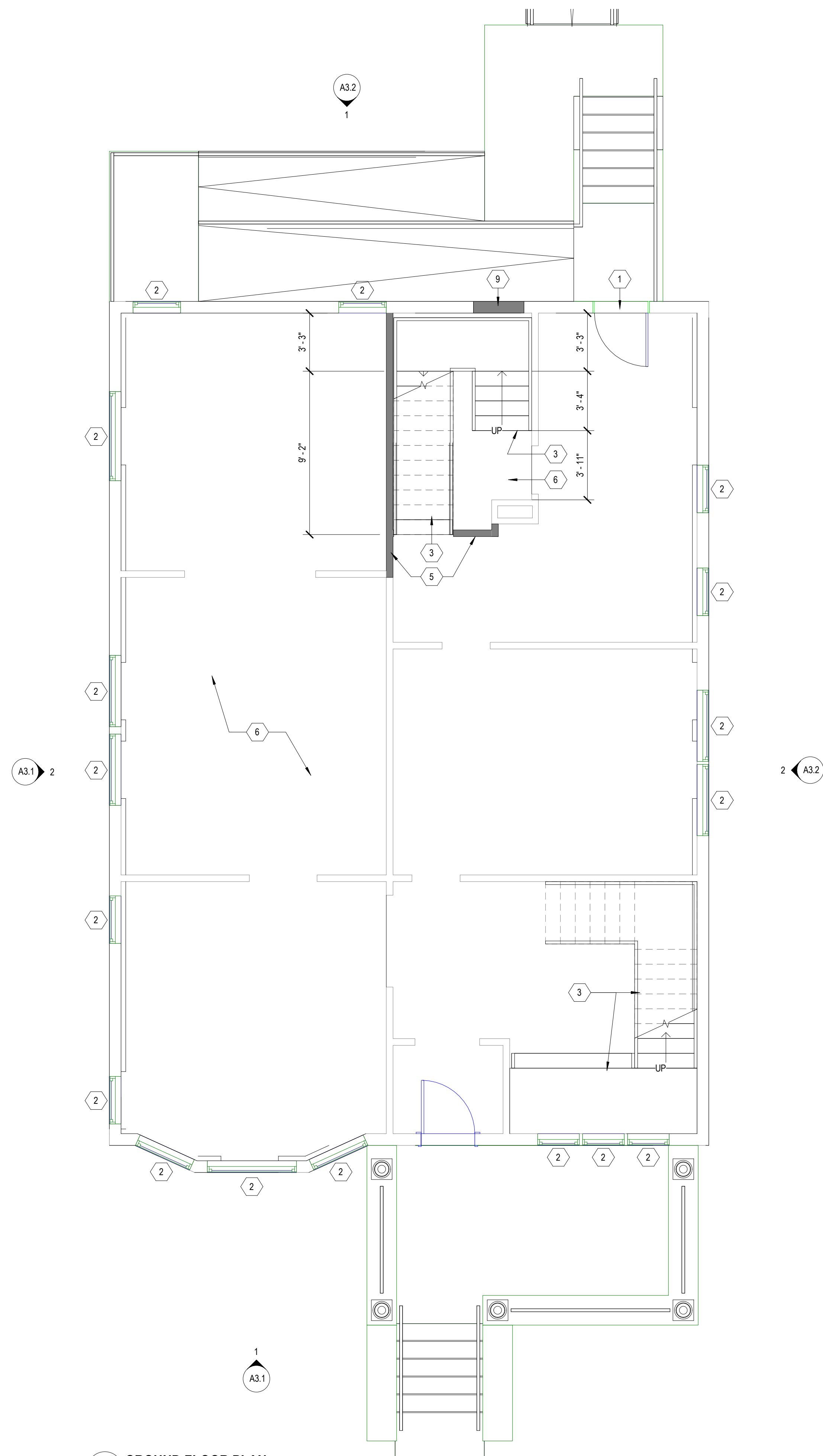
Drawn by :
 JRM

Sheet Title :
 FLOOR PLANS

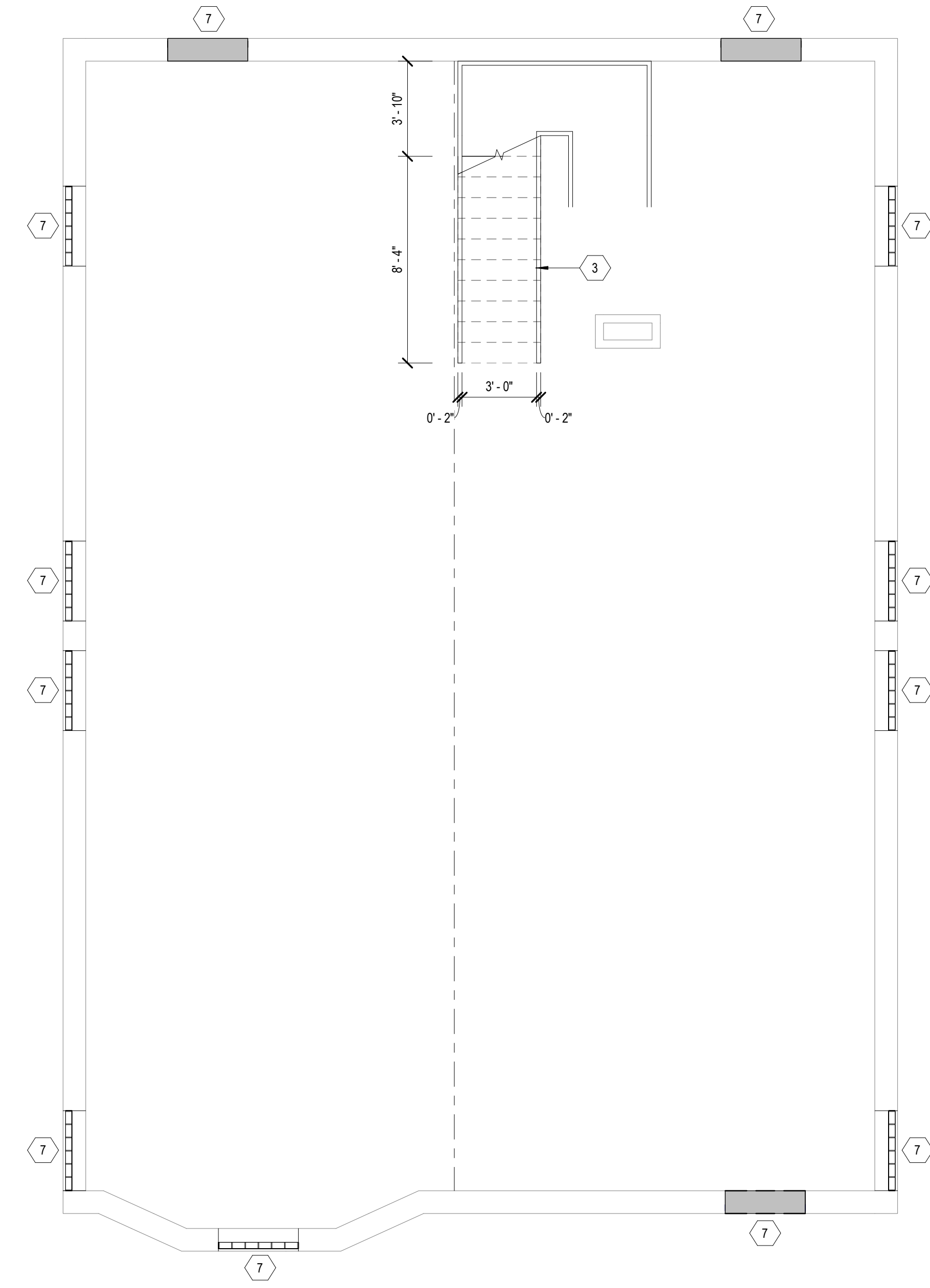
Project No. :
 2019070

Sheet No. :

A1.1



2 GROUND FLOOR PLAN
 SCALE: 1/4" = 1'-0"



1 BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"

FLOOR PLAN KEY NOTES:

(TYPICAL THIS SHEET ONLY)

- 1 NEW EXTERIOR WOOD ENTRY DOOR
- 2 NEW ALUMINUM CLAD WOOD WINDOWS
 BASIS OF DESIGN: ANDERSEN 400 SERIES
 3.5" EXTERIOR FLAT WOOD TRIM
 SIMULATED DIVIDED LIGHT, UPPER SASH (PATTERN TBD)
 SASH COLOR: BLACK
 TRIM COLOR: B-16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
 WINDOW SIZE TO MATCH EXISTING OPENING.
- 3 NEW WOOD STAIR WITH WOOD TREADS, RISERS, GUARDRAIL AND HANDRAIL.
- 4 NEW 2x10 WOOD FLOOR JOISTS WITH 3/4" PLYWOOD SUBFLOOR.
- 5 NEW INTERIOR PARTITION. 2x4 WOOD STUDS WITH 1/2" GYP. BD. EACH SIDE.
- 6 NEW 2x10 WOOD FLOOR JOISTS WITH 3/4" PLYWOOD SUBFLOOR.
- 7 NEW GLASS BLOCK WINDOWS.
- 8 NEW INTERIOR WOOD DOOR.
- 9 INFILL DOOR OR WINDOW OPENING WITH WOOD FRAME WALL AND/OR BRICK TO MATCH ADJACENT.

Project :

**SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER**

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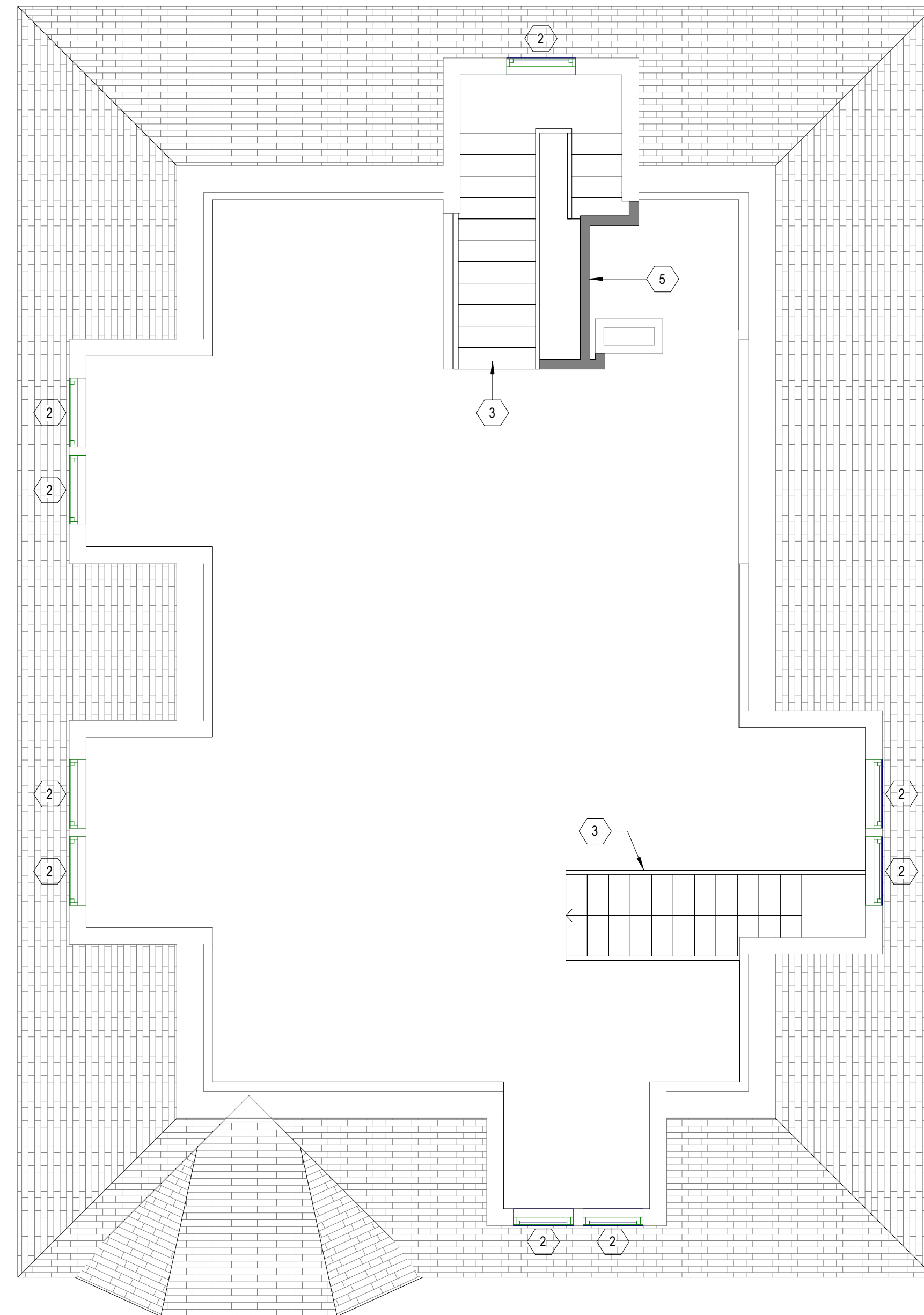
FLOOR PLANS

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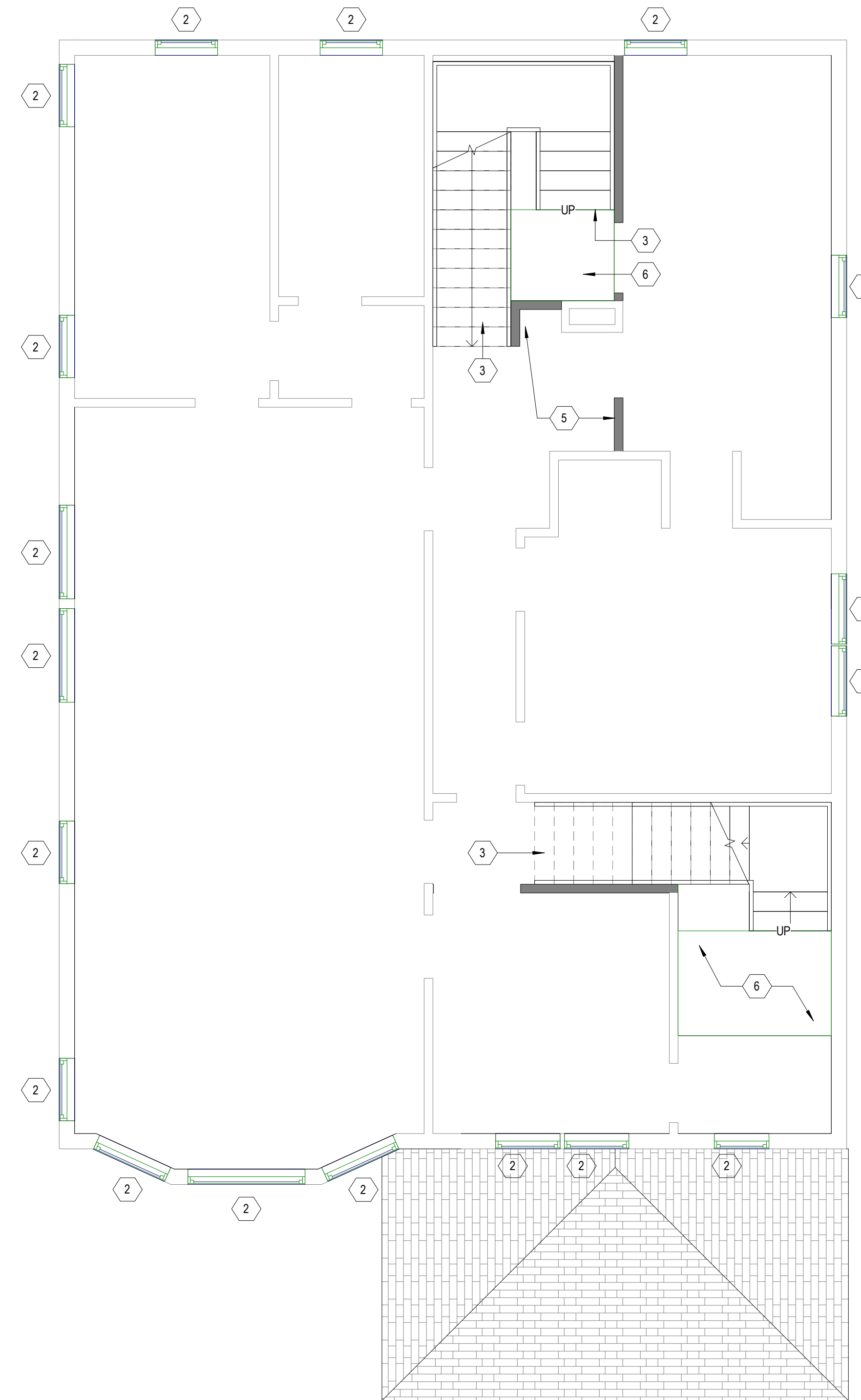
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Sheet No. :

A1.2



2 THIRD FLOOR PLAN
 SCALE: 1/4" = 1'-0"



1 SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"

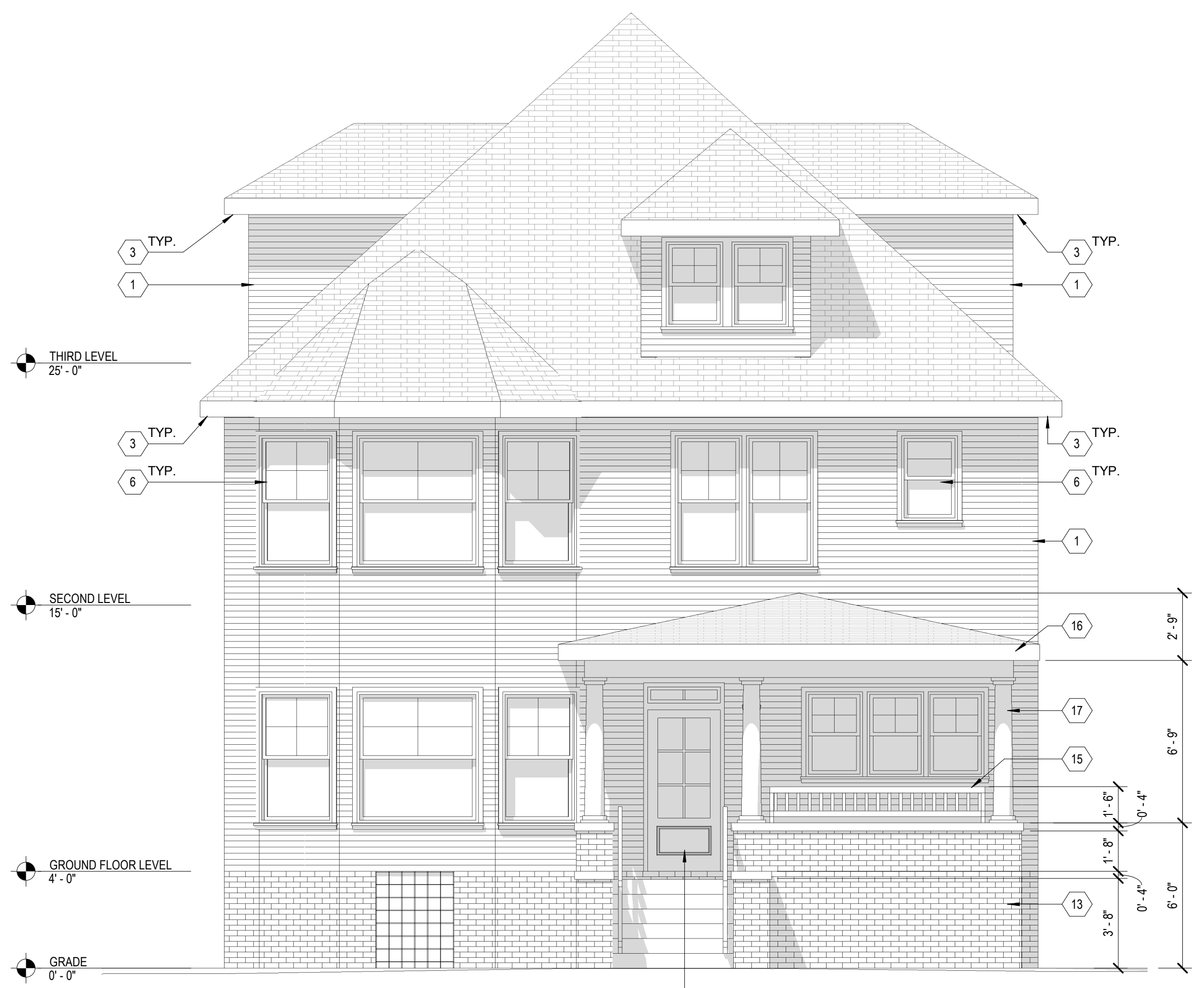
CONSULTANT:



2 SOUTH ELEVATION
 SCALE: 1/4" = 1'-0"

ELEVATION KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 NEW PAINTED HARDPLANK SMOOTH LAP SIDING, 4" EXPOSURE, COLOR: B:10 GRAYISH GREEN (HDC COLOR SYSTEM B CHART), ON NEW 1/2" PLYWOOD SHEATHING.
- 2 NEW PAINTED 3" FLAT WOOD TRIM, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 3 NEW FASCIA AND SOFFIT, PROFILES TO MATCH EXISTING, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 4 NEW 5" ALUM. K-STYLE GUTTERS AND DOWNSPOUTS AT ALL EAVES. PAINT TO MATCH ADJACENT WOOD TRIM.
- 5 NEW EXTERIOR WOOD ENTRY DOOR
- 6 NEW ALUMINUM CLAD WOOD WINDOWS
 BASIS OF DESIGN: ANDERSEN 400 SERIES
 3.5" EXTERIOR FLAT WOOD TRIM
 SIMULATED DIVIDED LIGHT, UPPER SASH (PATTERN TBD)
 SASH COLOR: BLACK
 TRIM COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
 WINDOW SIZE TO MATCH EXISTING OPENING.
- 7 NEW GLASS BLOCK WINDOWS.
- 8 NEW BURNISHED BLOCK RETAINING WALL WITH STONE CAP.
- 9 NEW CONCRETE SITE STAIR WITH BLACK METAL RAILING.
- 10 BURNISHED BLOCK SITE BENCH WITH STONE CAP.
- 11 NEW BRICK WHEELCHAIR RAMP WITH CONCRETE TOP AND BLACK METAL RAILING.
- 12 NEW BRICK STAIR WITH CONCRETE TREADS AND LANDING AND BLACK METAL RAILING.
- 13 NEW BRICK PORCH AND STAIR WITH CONCRETE TREADS AND LANDING. BRICK TO MATCH EXISTING
- 14 SITE SIGNAGE: 6" TALL BRUSHED METAL LETTERS ON STANDOFFS MOUNTED TO BURNISHED BLOCK.
- 15 BLACK METAL RAILING.
- 16 NEW WOOD PORCH CANOPY WITH ASPHALT SHINGLES. SHINGLES TO MATCH EXISTING. ALL WOOD TO BE PAINTED. B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 17 NEW PAINTED TAPERED ROUND WOOD COLUMNS. COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 18 NEW PAINTED WOOD BRACKET, DESIGN TO BE SIMILAR TO EXISTING. COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 19 NEW CONCRETE RAMP, WITH BLACK DOUBLE PIPE HANDRAIL WITH LOOP ENDS.
- 20 NEW EXTERIOR LIGHT SCONCE, BASIS OF DESIGN: ALLEN + ROTH CASTINE WALL LANTERN MODEL #39472, RUBBED BRONZE FINISH, 14.38" TALL, MEDIUM BASE.



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

Project :
 SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER

Issued for :
 HDC 01/28/2020

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Sheet Title :
 EXTERIOR
 ELEVATIONS

Project No. :
 2019070

Sheet No. :

A3.1

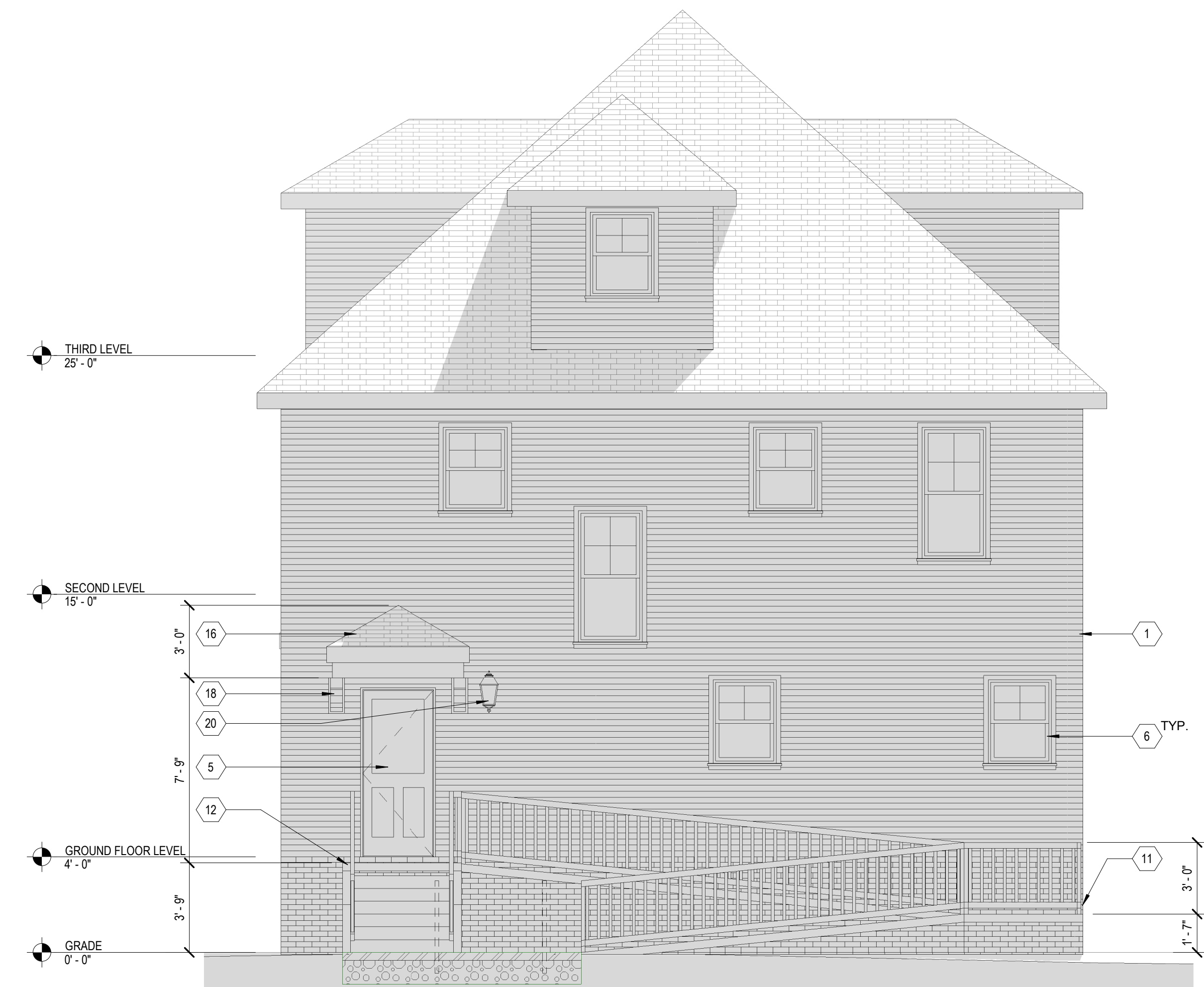
CONSULTANT:



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

ELEVATION KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 NEW PAINTED HARDPLANK SMOOTH LAP SIDING, 4" EXPOSURE, COLOR: B:10 GRAYISH GREEN (HDC COLOR SYSTEM B CHART), ON NEW 1/2" PLYWOOD SHEATHING.
- 2 NEW PAINTED 3" FLAT WOOD TRIM, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 3 NEW FASCIA AND SOFFIT, PROFILES TO MATCH EXISTING, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 4 NEW 5" ALUM. K-STYLE GUTTERS AND DOWNSPOUTS AT ALL EAVES. PAINT TO MATCH ADJACENT WOOD TRIM.
- 5 NEW EXTERIOR WOOD ENTRY DOOR
- 6 NEW ALUMINUM CLAD WOOD WINDOWS
 BASIS OF DESIGN: ANDERSEN 400 SERIES
 3.5" EXTERIOR FLAT WOOD TRIM
 SIMULATED DIVIDED LIGHT, UPPER SASH (PATTERN TBD)
 SASH COLOR: BLACK
 TRIM COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
 WINDOW SIZE TO MATCH EXISTING OPENING.
- 7 NEW GLASS BLOCK WINDOWS.
- 8 NEW BURNISHED BLOCK RETAINING WALL WITH STONE CAP.
- 9 NEW CONCRETE SITE STAIR WITH BLACK METAL RAILING.
- 10 BURNISHED BLOCK SITE BENCH WITH STONE CAP.
- 11 NEW WOOD WHEELCHAIR RAMP WITH CONCRETE TOP AND BLACK METAL RAILING.
- 12 NEW BRICK STAIR WITH CONCRETE TREADS AND LANDING AND BLACK METAL RAILING.
- 13 NEW BRICK PORCH AND STAIR WITH CONCRETE TREADS AND LANDING. BRICK TO MATCH EXISTING
- 14 SITE SIGNAGE: 6" TALL BRUSHED METAL LETTERS ON STANDOFFS MOUNTED TO BURNISHED BLOCK.
- 15 BLACK METAL RAILING.
- 16 NEW WOOD PORCH CANOPY WITH ASPHALT SHINGLES. SHINGLES TO MATCH EXISTING. ALL WOOD TO BE PAINTED. B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 17 NEW PAINTED TAPERED ROUND WOOD COLUMNS. COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 18 NEW PAINTED WOOD BRACKET, DESIGN TO BE SIMILAR TO EXISTING. COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 19 NEW CONCRETE RAMP, WITH BLACK DOUBLE PIPE HANDRAIL WITH LOOP ENDS.
- 20 NEW EXTERIOR LIGHT SCONCE, BASIS OF DESIGN: ALLEN + ROTH CASTINE WALL LANTERN MODEL #39472, RUBBED BRONZE FINISH, 14.38" TALL, MEDIUM BASE.



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

Project :
**SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER**

Issued for :
 HDC 01/28/2020

Drawn by :
 JRM

Sheet Title :
 EXTERIOR
 ELEVATIONS

Project No. :
 2019070

Sheet No. :
A3.2

CONSULTANT:



2 REAR VIEW



1 FRONT VIEW

ELEVATION KEY NOTES:
 (TYPICAL THIS SHEET ONLY)

- 1 NEW PAINTED HARDPLANK SMOOTH LAP SIDING, 4" EXPOSURE, COLOR: B:10 GRAYISH GREEN (HDC COLOR SYSTEM B CHART), ON NEW 1/2" PLYWOOD SHEATHING.
- 2 NEW PAINTED 3" FLAT WOOD TRIM, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 3 NEW FASCIA AND SOFFIT, PROFILES TO MATCH EXISTING, COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 4 NEW 5" ALUM. K-STYLE GUTTERS AND DOWNSPOUTS AT ALL EAVES. PAINT TO MATCH ADJACENT WOOD TRIM.
- 5 NEW EXTERIOR WOOD ENTRY DOOR
- 6 NEW ALUMINUM CLAD WOOD WINDOWS
 BASIS OF DESIGN: ANDERSEN 400 SERIES
 3.5" EXTERIOR FLAT WOOD TRIM
 SIMULATED DIVIDED LIGHT, UPPER SASH (PATTERN TBD)
 SASH COLOR: BLACK
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- 13 NEW BRICK PORCH AND STAIR WITH CONCRETE TREADS AND LANDING. BRICK TO MATCH EXISTING
- 14 SITE SIGNAGE: 6" TALL BRUSHED METAL LETTERS ON STANDOFFS MOUNTED TO BURNISHED BLOCK.
- 15 BLACK METAL RAILING.
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- 18 NEW PAINTED WOOD BRACKET, DESIGN TO BE SIMILAR TO EXISTING. COLOR: B:16 DARK GRAYISH OLIVE (HDC COLOR SYSTEM B CHART)
- 19 NEW CONCRETE RAMP, WITH BLACK DOUBLE PIPE HANDRAIL WITH LOOP ENDS.
- 20 NEW EXTERIOR LIGHT SCONCE, BASIS OF DESIGN: ALLEN + ROTH CASTINE WALL LANTERN MODEL #39472, RUBBED BRONZE FINISH, 14.38" TALL, MEDIUM BASE.

Project :
**SOUTHWEST DETROIT
 IMMIGRANT AND
 REFUGEE CENTER**

Issued for :
 HDC 01/28/2020

Drawn by :
 JRM

Sheet Title :
 EXTERIOR
 PERSPECTIVE VIEWS

Project No. :
 2019070

Sheet No. :
A3.3

March 20, 2020

RE: 329 W. Grand Boulevard Exterior Renovation, Historic District Commission Submission

Description of Existing Window Conditions

The home is outfitted throughout with wood framed, single paned windows that are primarily double hung, with a few examples of casement windows in a few locations. All of the windows exhibit a range of disrepair and damage, with many missing major components or missing the entire window. Below are common deficiencies found in the existing windows:

- Single pane glazing which is loose in the sash and in need of re-glazing and sealing.
- Surfaces of sash that have deteriorated or been damaged to the point that hardware is missing and cannot be reattached to surface.
- Rotting of window opening framing
- Lack of or complete degradation of window opening weather seals.
- Missing/broken glazing
- Missing complete sash
- Missing complete window

Given the transient nature of residency of the finished project and a need to ease window operation and maintenance across the building, we propose to replace all windows with new, which are to match the existing configuration/operation and appearance of what would have been in place originally.

Window Replacement

The following section indicates existing windows proposed to be replaced, and outlines issues that have been observed in each window. Please refer to the floor plans for window locations.

Window 1-01 (First Floor, East Elevation)

- Missing lower sash



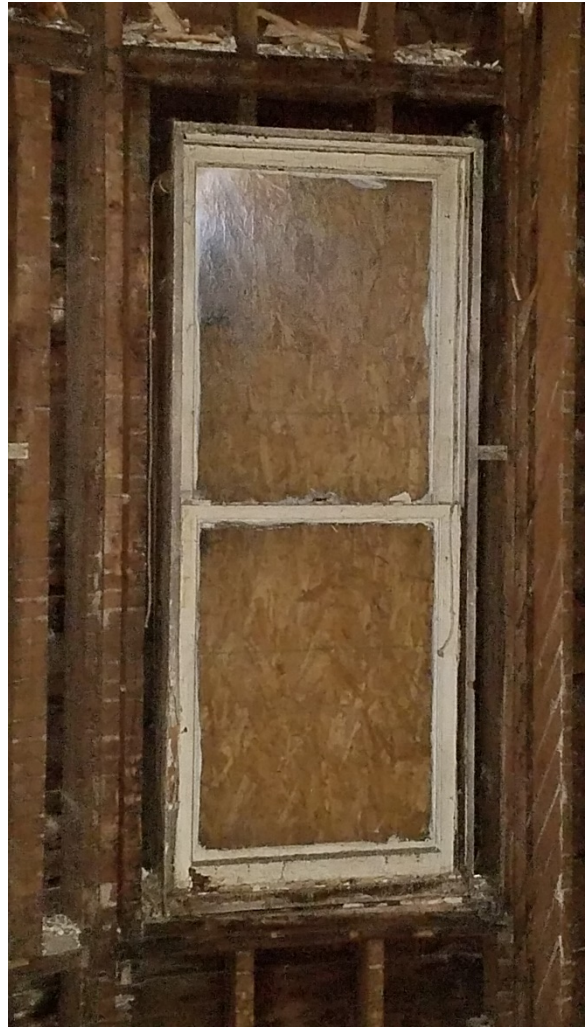
Window 1-02 (First Floor, East Elevation)

- Missing lower rail of upper sash
- Missing lower sash



Window 1-03 (First Floor, East Elevation)

- Missing glazing
- Damage to lower sash
- Rotting of opening frame @ sill



Window 1-04 (First Floor, South Elevation)

- Rotting of opening frame @ sill



Window 1-05 (First Floor, South Elevation)

- Broken glazing
- Damage to sash frame
- Rotting of opening frame @ sill



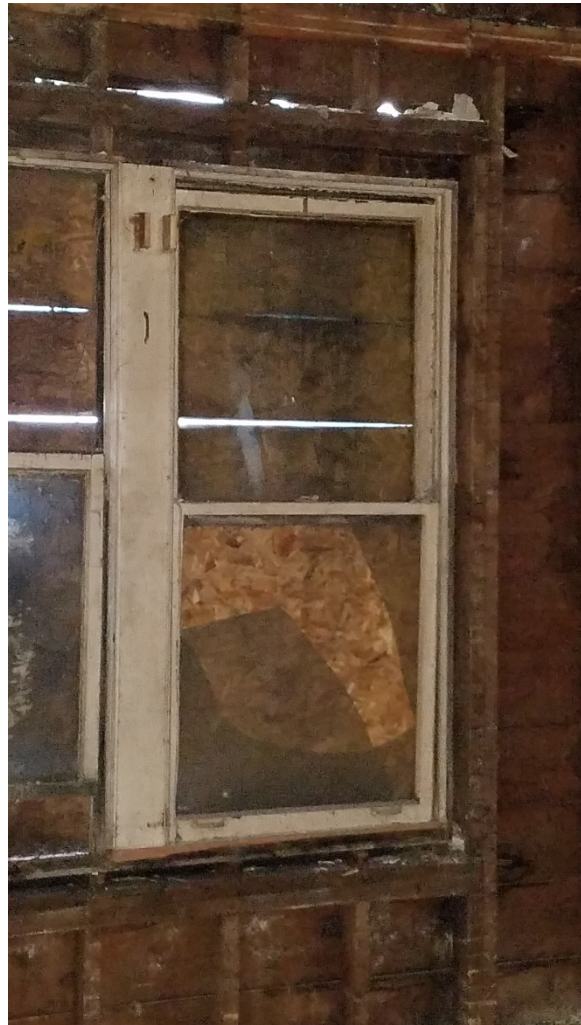
Window 1-06 (First Floor, South Elevation (triple double-hung))

- Missing glazing
- Missing upper sash of middle unit
- Damage (splitting, rot, deep gouges) to all remaining sashes
- Rotting of opening frame @ sill and intermediate verticals



Window 1-07 (First Floor, South Elevation (Double Double-hung))

- Missing upper sash of left unit
- Damage to lower sash of right unit
- Rotting of opening frame @ sill
- Broken glazing
- Damage/rot at sill of lower sash (right unit)
- Spilt all the way along top of right upper sash



Window 1-08 (First Floor, West Elevation)

- Damage to lower corner of left sash



Window 1-09 (First Floor, West Elevation)

- Missing complete window



Window 1-10 (First Floor, West Elevation)

- Missing lower sash
- Missing lower rail of upper sash
- Missing glazing of upper sash
- Extensive rot of opening framing sill and right side



Window 1-11 (First Floor, North Elevation)

- Missing Complete Window



Window 1-12 (First Floor, North Elevation)

- Missing Complete Window



Window 1-13 (First Floor, North Elevation (Triple double-hung))

- Missing all lower sashes
- Rotting at opening framing (sill)
- Missing lower rail at left unit upper sash



Window 1-14 (First Floor, East Elevation (Triple double-hung))

- Missing/broken Glazing
- Broken/missing opening mechanism components (snapped ropes, missing pullies)



Window 2-01 (Second Floor, East Elevation)

- Missing lower sash
- Missing upper sash glazing



Window 2-02 (Second Floor, East Elevation)

- Damage, rot at lower sill lower corners
- Broken glazing



Window 2-03 (Second Floor, East Elevation)

- Missing lower sash glazing
- Extensive damage (chips, gouges, splitting at lower sash rails)



Window 2-04 (Second Floor, South Elevation)

- Rotting at opening framing (sill)
- Splitting at sash inside corners



Window 2-05 (Second Floor, South Elevation)

- Missing glazing
- Extensive splitting, gouges, surface damage to both sashes



Window 2-06 (Second Floor, South Elevation)

- Rot at opening framing (sill)
- Extensive splitting/surface damage at lower sash



Window 2-07 (Second Floor, South Elevation)

- Extensive damage to opening framing @ sill
- Extensive damage to bottom rail of slower sash
- Missing glazing @ lower sash



Window 2-08 (Second Floor, South Elevation)

- Missing glazing (lower sash)
- Extensive damage to opening framing @ sill
- Deterioration at bottom of lower sash



Window 2-09 (Second Floor, West Elevation)

- Missing lower sash
- Missing lower rail at upper sash
- Missing glazing



Window 2-10 (Second Floor, South Elevation)

- Missing complete window



Window 2-11 (Second Floor, West Elevation)

- Missing complete window



Window 2-12 (Second Floor, North Elevation)

- Missing upper sash
- Rot/surface damage at left stile of lower sash



4545

architecture

Window 2-13 (Second Floor, North Elevation)
(Double Double-hung)

- Missing both upper sashes
- Surface damage, splitting at lower rail of lower sashes



4545

architecture

Window 2-14 (Second Floor, East Elevation)

- Missing glazing at upper sash
- Splitting/chipping at lower sash, lower rail



Window 2-15 (Second Floor, West Elevation)
(Double Double-hung)

- Missing both lower sashes



4545

architecture

Window 3-01 (Third Floor, East Elevation (Double Double-hung))

- Extensive surface damage to lower sashes
- Missing glazing



Window 3-02 (Third Floor, South Elevation)

- Missing complete window



Window 3-03 (Third Floor, South Elevation)

- Missing lower sash
- Missing glazing
- Missing lower rail of upper sash
- Missing sill framing @ opening



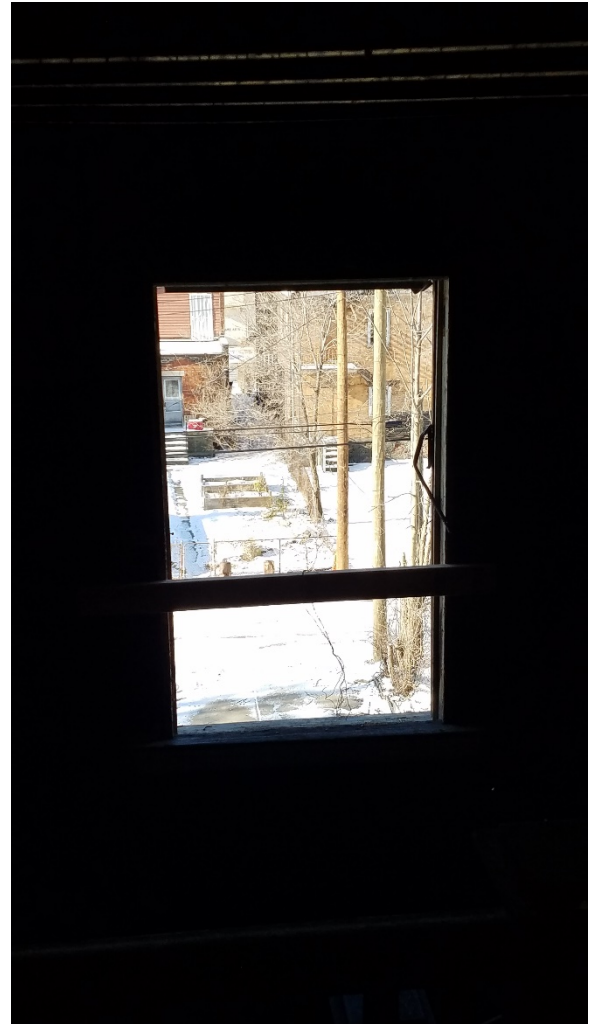
Window 3-04 (Third Floor, West Elevation)

- Missing glazing
- Missing lower rail of upper sash
- Surface damage to lower sash



Window 3-05 (Third Floor, North Elevation)

- Missing complete window





ASPYRE
COLLECTION
by **JamesHardie** TM

Distinctive design that's engineered to last

Product Catalog



INTRODUCING THE
ASPYRE COLLECTION
BY JAMES HARDIE™

Artisan Shiplap Siding and
Reveal Panel with Reveal Surround Trim



ASPYRE

COLLECTION
by **JamesHardie**™

artisan + REVEAL
Siding | Trim™ Panel System™

Craft one-of-a-kind homes by integrating contrasting elements using the Aspyre Collection by James Hardie™. Ever-changing shadow lines cast by Artisan® siding add warmth to the fixed geometry of smooth Reveal® Panels.

Contents

Introduction	2-3
Performance	4-5
Artisan® Siding and Trim	6-15
Reveal® Panel System	16-19



PERFORMANCE

THROUGH INNOVATION

The Aspyre Collection features the uncompromising performance you've come to expect from James Hardie.

JAMES HARDIE® FIBER CEMENT IS TOUGHER THAN THE ELEMENTS

Artisan® and Reveal® products are uniquely Engineered for Climate® – specifically designed to resist the effects of your local weather conditions.



**Stands up to storms
and harsh weather**



**Water resistant
to help protect
against swelling**



**Won't be eaten by
animals or insects**



Fire resistant

Artisan® V-Groove Siding

artisan

Siding | Trim™



RETHINK

THE CLASSICS

Thick Artisan® siding

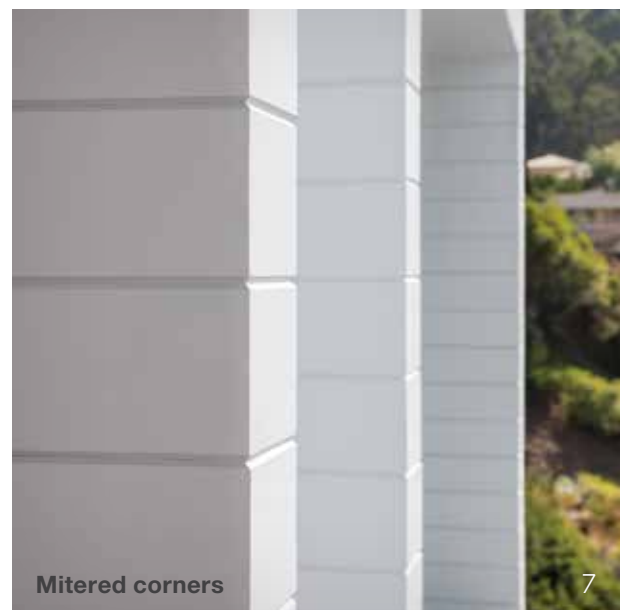
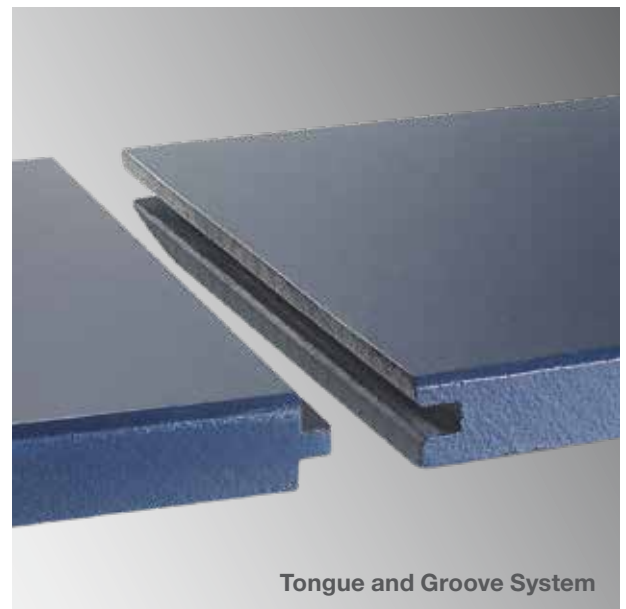
casts gorgeous shadow lines, recreating milled cedar profiles with lower maintenance.

Tongue and Groove System

helps enable faster, cleaner installation. Orient vertically, horizontally or use as soffit.

Mitered corners

add sophistication to your design and can be crafted on-site with any Artisan® profile.





LOCK JOINT

PROFILES



ARTISAN® V-GROOVE SIDING

- Deep v-shaped channels
- Great for vertical, horizontal and soffit applications

WIDTH
8.25 in
(7.0 in Exposure)

THICKNESS
5/8 in

TEXTURE
Smooth

FINISH
Primed

PROFILE
WIDTH x DEPTH
0.5 in x 0.263 in

ARTISAN® BEVEL CHANNEL SIDING

- Chiseled lines emphasize its deep channels
- Adds an upscale accent to every home

WIDTH
10.25 in
(9.0 in Exposure)

THICKNESS
5/8 in

TEXTURE
Smooth

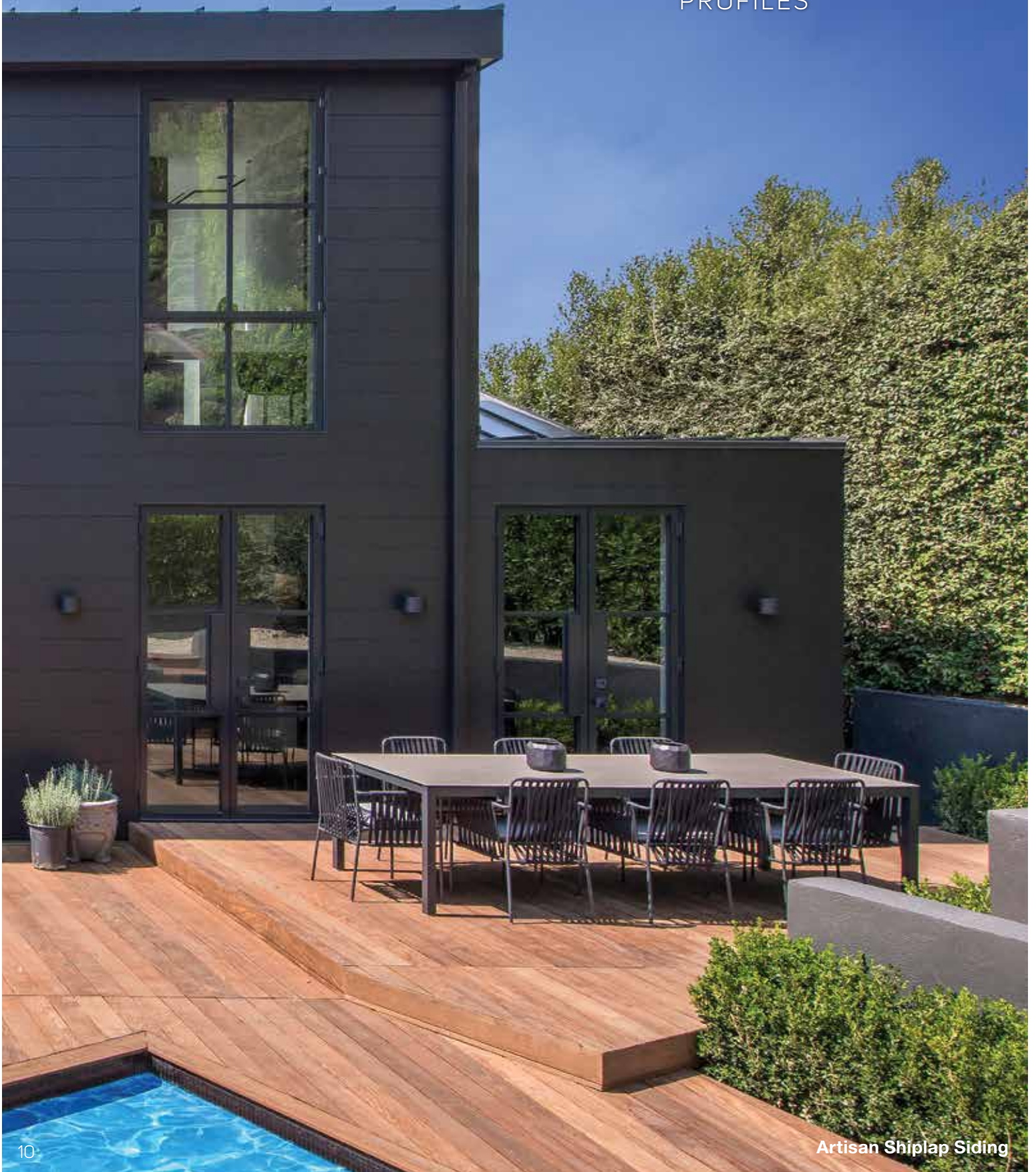
FINISH
Primed

PROFILE
WIDTH x DEPTH
1.68 in x 0.263 in



LOCK JOINT

PROFILES





ARTISAN® SHIPLAP SIDING

- Brings charm to any home
- Design flexibility from modern to rustic

WIDTH
10.25 in
(9.0 in Exposure)

THICKNESS
5/8 in

TEXTURE
Smooth

FINISH
Primed

PROFILE
WIDTH x DEPTH
0.15 in x 0.263 in

ARTISAN® SQUARE CHANNEL SIDING

- Defined right-angle cuts
- Uniquely wide channel exposure

WIDTH
10.25 in
(9.0 in Exposure)

THICKNESS
5/8 in

TEXTURE
Smooth

FINISH
Primed

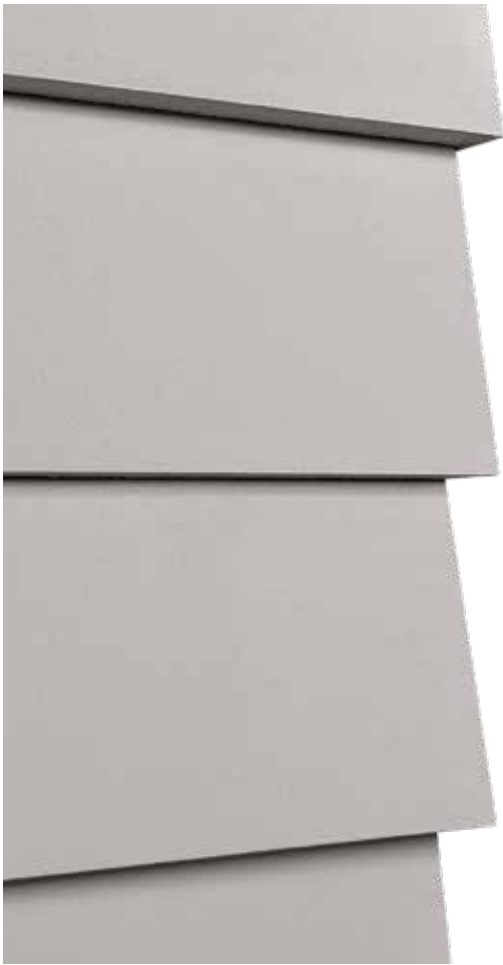
PROFILE
WIDTH x DEPTH
1.0 in x 0.263 in



TONGUE & GROOVE

PROFILES





ARTISAN® LAP SIDING

- Casts deep shadow lines
- Luxury look with long-lasting performance

<p>WIDTH</p> <p>5.25 in (4.0 in Exposure)</p> <p>7.25 in (6.0 in Exposure)</p> <p>8.25 in (7.0 in Exposure)</p>	<p>THICKNESS</p> <p>5/8 in</p>	<p>TEXTURE</p> <p>Smooth and Woodgrain</p>	<p>FINISH</p> <p>Primed</p>
---	--------------------------------	--	-----------------------------

ARTISAN® BEADED LAP SIDING

- Tailored touch replicates traditional coastal style
- Creates a strong horizontal definition

<p>WIDTH</p> <p>8.25 in (7.0 in Exposure)</p>	<p>THICKNESS</p> <p>5/8 in</p>	<p>TEXTURE</p> <p>Smooth</p>	<p>FINISH</p> <p>Primed</p>
---	--------------------------------	------------------------------	-----------------------------



ARTISAN® TRIM

- Perfect partner for Artisan® profiles
- Thick boards for distinctly deep shadow lines

WIDTH
3.5 in
and 5.5 in

THICKNESS
1.5 in

WEIGHT
4.55 lbs/sq ft

LENGTH
144.0 in

FINISH
Primed

Artisan Trim and
Artisan V-Groove Siding





Artisan Lap Siding

SOPHISTICATED STYLING

FLAT WALL PATTERNS



Artisan V-Groove



Artisan Bevel Channel



LAP SIDING

Artisan Lap



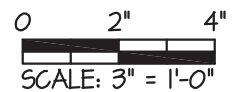
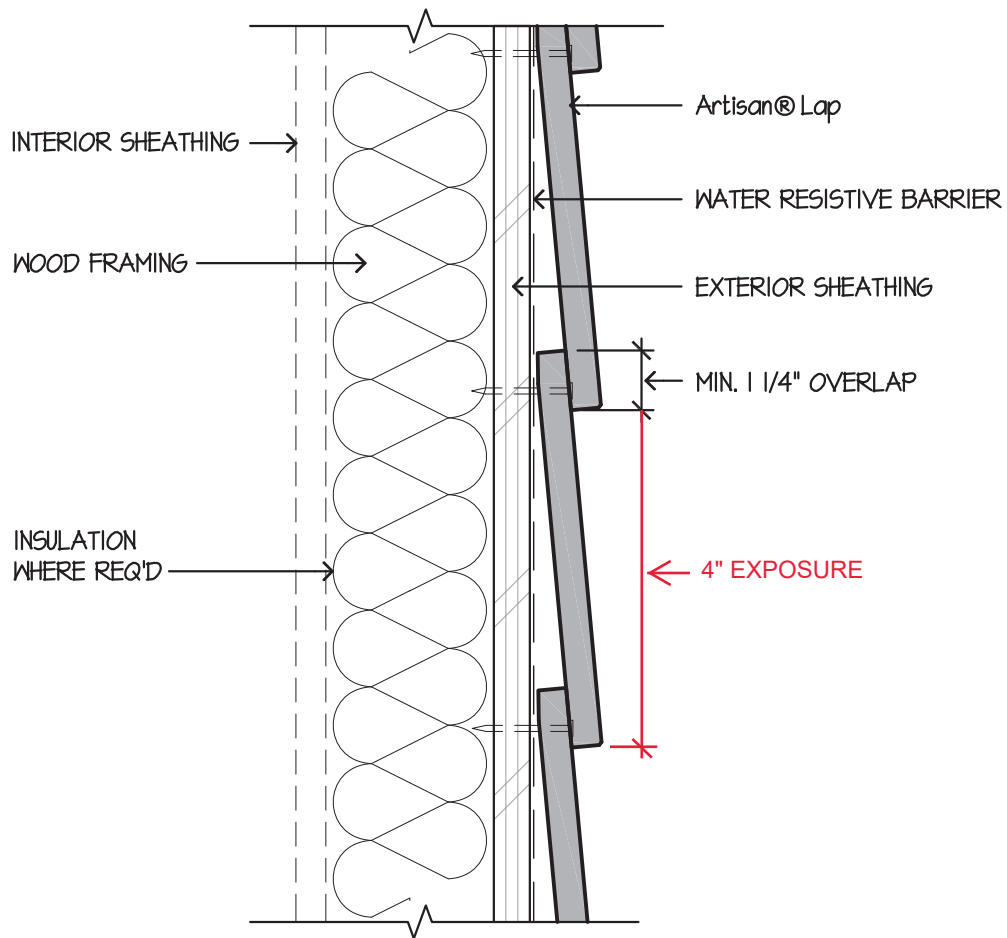
Artisan Shiplap



Artisan Square Channel



Artisan Beaded Lap



HORIZONTAL LAP VIEW

These drawings are published as an information guide only. These CAD drawings are intended as templates to assist the designer. They do not contain the full details required for construction and must be read in conjunction with the Installation Instructions on www.jameshardie.com. You should obtain architectural, engineering or other technical advice to assess the suitability of these drawings to the requirements of your particular project. James Hardie accepts no liability in respect to the use of these drawings.

For fastener specifications and complete installation instructions refer to appropriate documentation at www.JamesHardie.com

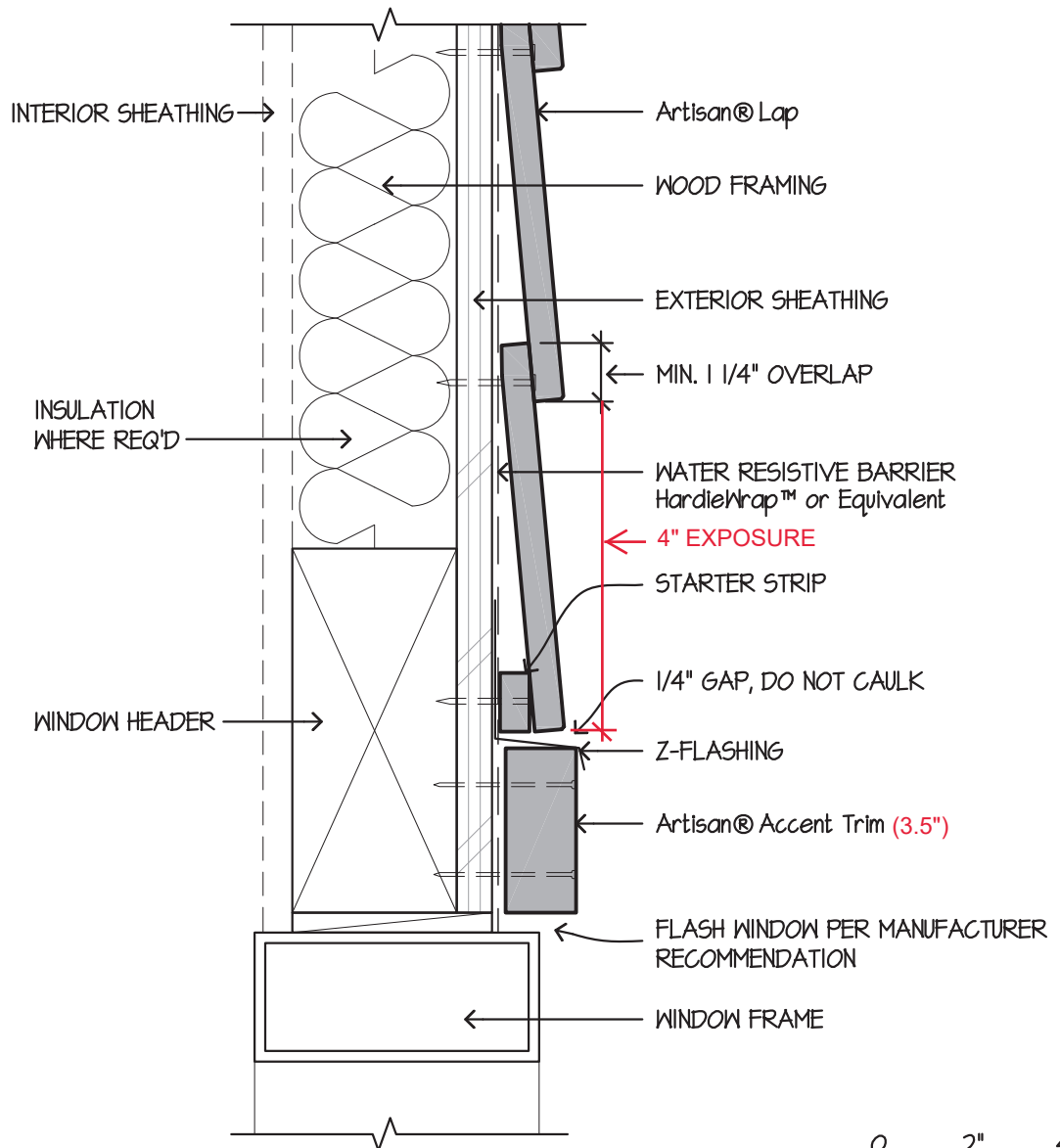
DETAIL:

**ARTISAN
1.05**

Artisan® Lap Siding Details

- Wood Framing
- OSB or Plywood Sheathing
- Shown with Siding Nails Blind Fastened into Framing

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JamesHardie



WINDOW/DOOR HEAD

These drawings are published as an information guide only. These CAD drawings are intended as templates to assist the designer. They do not contain the full details required for construction and must be read in conjunction with the installation instructions on www.jameshardie.com. You should obtain architectural, engineering or other technical advice to assess the suitability of these drawings to the requirements of your particular project. James Hardie accepts no liability in respect to the use of these drawings.

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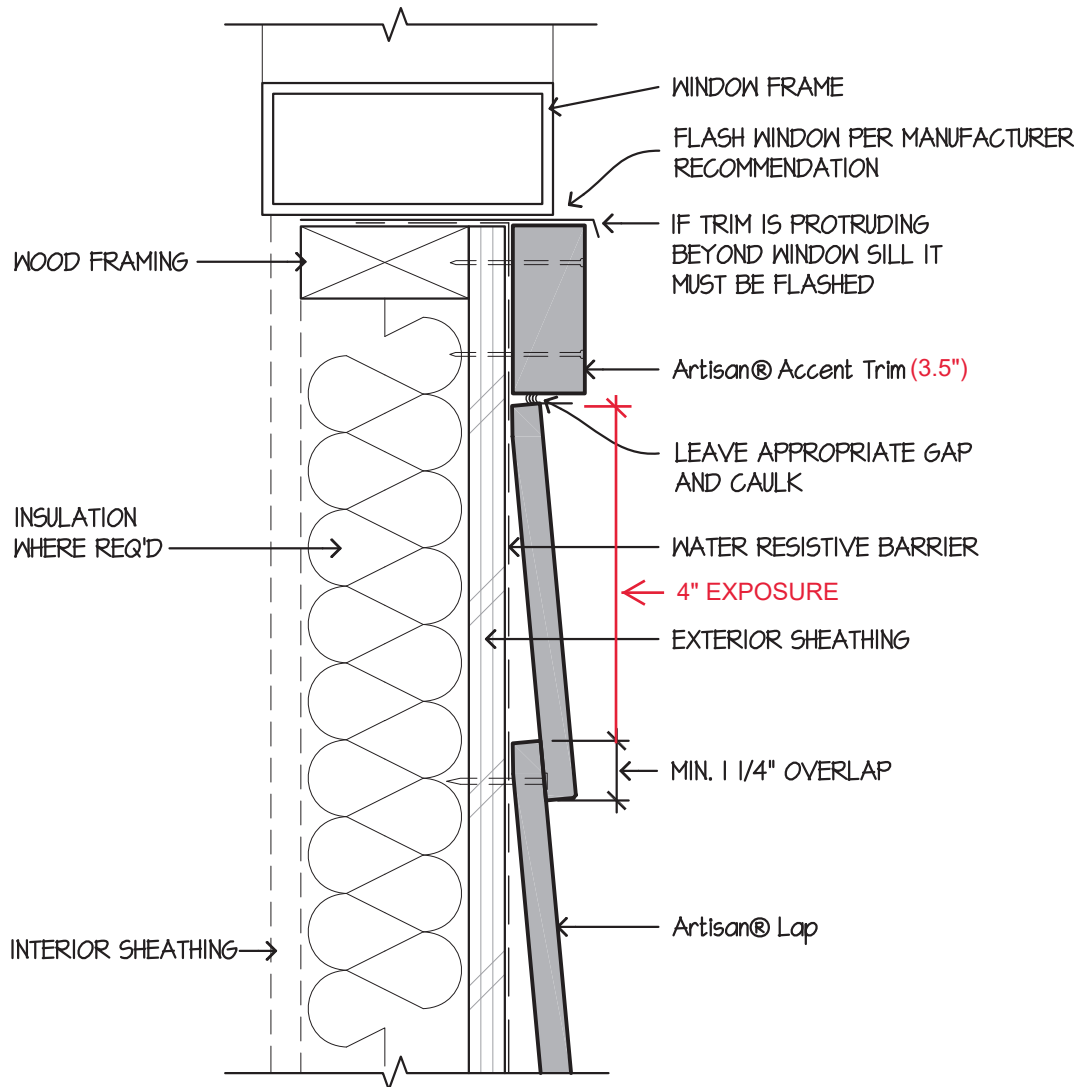
DETAIL:

**ARTISAN
1.03**

Artisan® Lap Siding Details

- Wood Framing
- OSB or Plywood Sheathing
- Shown with Siding Nails Blind Fastened into Framing

artisan™
JamesHardie



WINDOW SILL

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For fastener specifications and complete installation instructions refer to appropriate documentation at www.JamesHardie.com

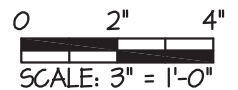
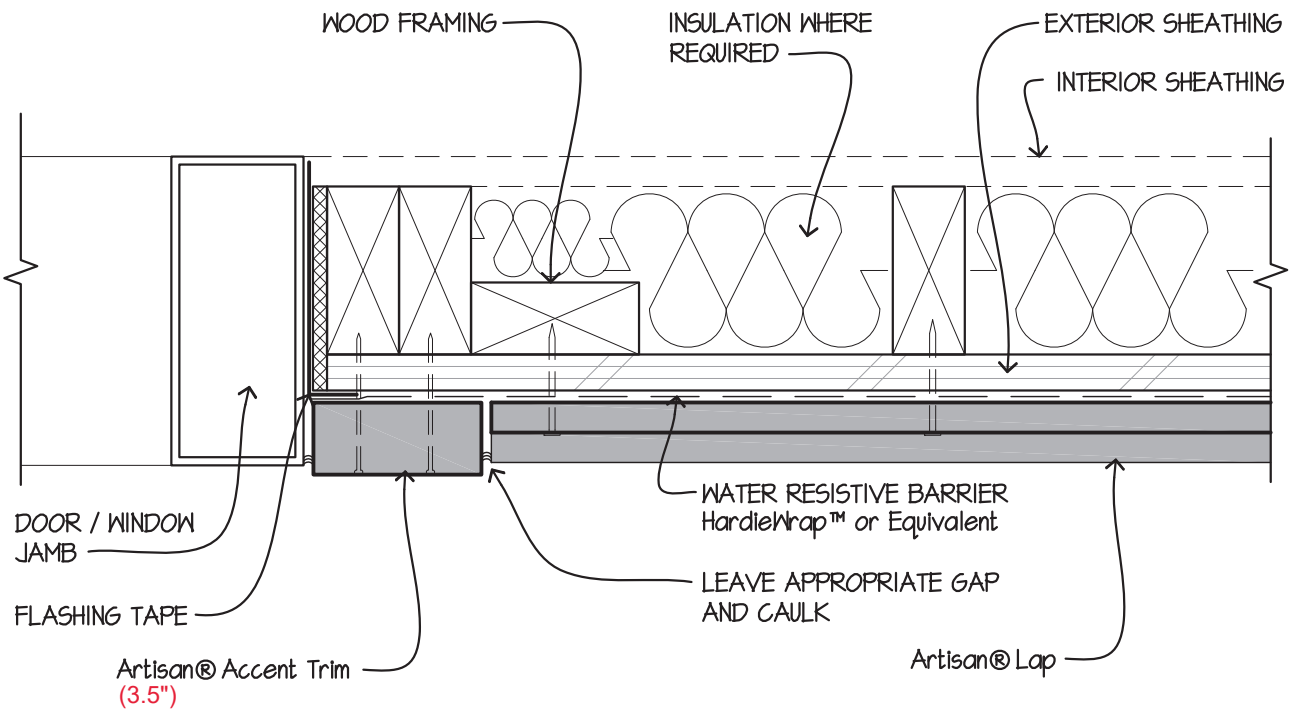
DETAIL:

**ARTISAN
1.04**

Artisan® Lap Siding Details

- Wood Framing
- OSB or Plywood Sheathing
- Shown with Siding Nails Blind Fastened into Framing

artisan[™]
JamesHardie



DOOR / WINDOW JAMB

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For fastener specifications and complete installation instructions refer to appropriate documentation at www.JamesHardie.com

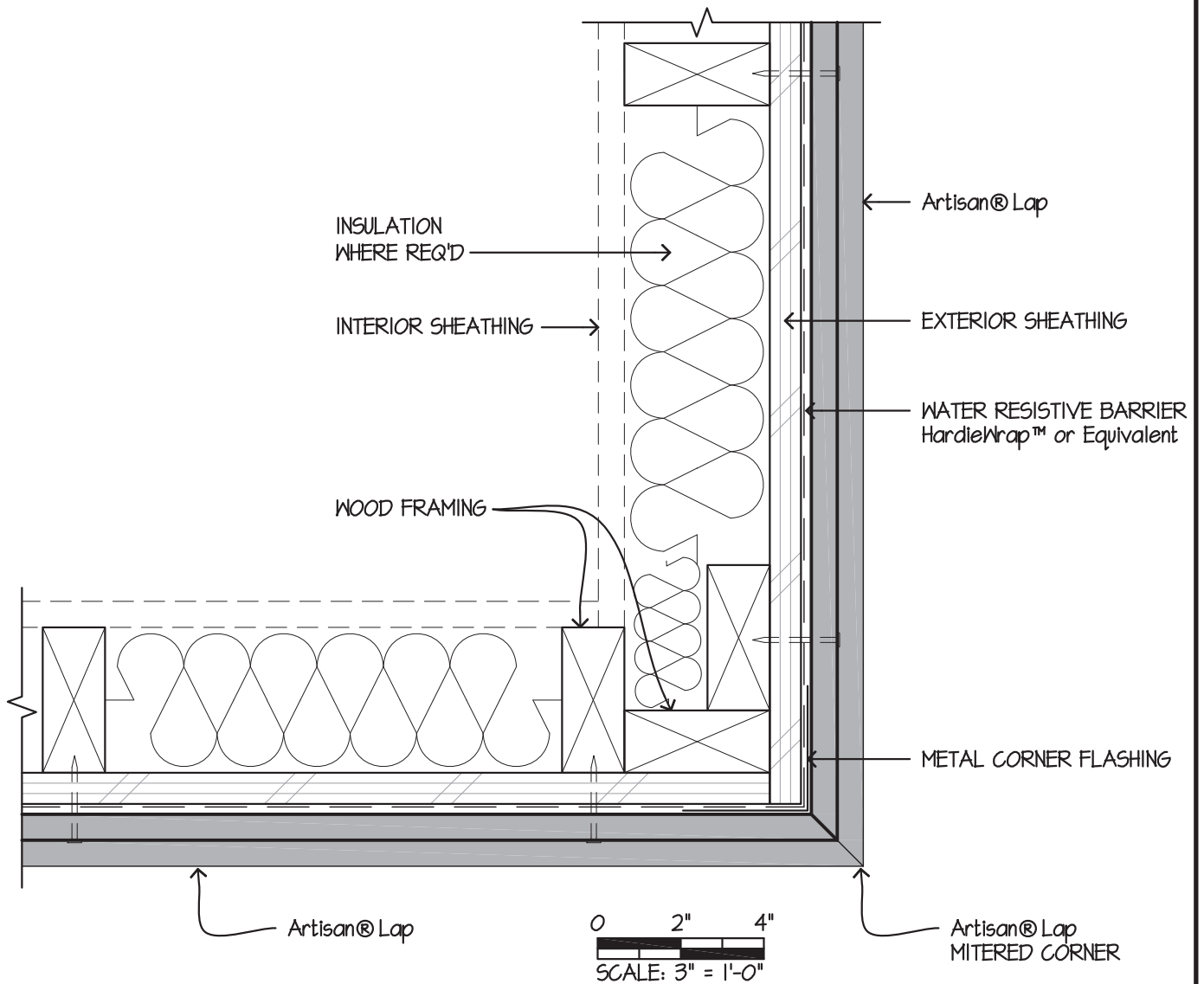
DETAIL:

**ARTISAN
1.10**

Artisan® Lap Siding Details

- Wood Framing
- OSB or Plywood Sheathing
- Shown with Siding Nails Blind Fastened into Framing

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OUTSIDE CORNER - MITERED LAP SIDING

These drawings are published as an information guide only. These CAD drawings are intended as templates to assist the designer. They do not contain the full details required for construction and must be read in conjunction with the Installation Instructions on www.jameshardie.com. You should obtain architectural, engineering or other technical advice to assess the suitability of these drawings to the requirements of your particular project. James Hardie accepts no liability in respect to the use of these drawings.

For fastener specifications and complete installation instructions refer to appropriate documentation at www.JamesHardie.com

DETAIL:

**ARTISAN
1.12**

Artisan® Lap Siding Details

- Wood Framing
- OSB or Plywood Sheathing
- Shown with Siding Nails Blind Fastened into Framing

artisan™
JamesHardie

Area Lighting

Bostonian Series - PB1



Premium with Fleur-de-lis Finial

Deluxe with Spear Finial

Standard with Spear Finial

Caps:

Decorative spun aluminum cap with black powdercoat finish.

Finial:

Finials have spun aluminum base with cast aluminum Fleur-de-lis or Spear.

Lens:

LexaLite Lindy prismatic acrylic globes, Type III or Type V, with 203mm neck.

Decorative Bands:

Stamped and formed heavy duty aluminum clamp bands with black powdercoat finish. Available as Standard clamp band, Deluxe clamp band with decorative band, or Premium clamp band with decorative band with four decorative supports. Black powdercoat finish. Includes black oxide mounting hardware.

Housing:

PFCN10 sand cast aluminum housing, stamped steel plate, ballast, capacitor, & ignitor brackets, black powdercoat finish. Includes mounting hardware.

Socket:

Porcelain 4KV pulse rated medium (MD) or 5KV pulse rated mogul (MG) base socket with nickel plated screw shell.

Mounting:

Accommodates 76mm poles or tenons

Wattage:

High Pressure Sodium: 50 to 150w

Metal Halide: 70 to 100w

Pulse Start: 150w

Listing & Ratings:

CSA: Listed for wet locations

Other wattages & custom colors available upon request.

Model	Gross EPA	Drag EPA	Net EPA
PB1 Models w/ Fitter	2.37	1.19	1.54
PADAB Dual Arm	1.42	0.71	0.92

Gross EPA - Square Feet of Vertical Plane Surface

Drag EPA - Gross EPA Adjusted for Drag Factor (.5)

NET EPA - Drag EPA x Safety Factor of 1.3

EPA's ARE APPROXIMATE, SPECIFIC TO LOCATION AND LOCAL CODES. CONSULT ENGINEER FOR SPECIFIC APPLICATION

Unwired Units

Catalog #	Description
PB10#*B	Bostonian Globe, 203mm neck, no Fitter
PB10#*10B	Bostonian Globe, 203mm neck, with Fitter

Complete Units (Lamp Included)

Catalog #	Wattage	Voltage	Lamp	Ballast
PB10#*H70R120MDLB	70	120	HPS	R-NPF
PB10#*H100R120MDLB	100	120	HPS	R-NPF
PB10#*H150R120MDLB	150	120	HPS	R-NPF
PB10#*H50DMDLB	50	120/277	HPS	HX-HPF
PB10#*H50DMGLB	50	120/277	HPS	HX-HPF
PB10#*H70QMDLB	70	Quad	HPS	HX-HPF
PB10#*H70QMGLB	70	Quad	HPS	HX-HPF
PB10#*H100QMDLB	100	Quad	HPS	HX-HPF
PB10#*H100QMGLB	100	Quad	HPS	HX-HPF
PB10#*H150QMDLB	150	Quad	HPS	HX-HPF
PB10#*H150QMGLB	150	Quad	HPS	HX-HPF
PB10#*M70QMDLB	70	Quad	MH	HX-HPF
PB10#*M70QMGLB	70	Quad	MH	HX-HPF
PB10#*M100QMDLB	100	Quad	MH	HX-HPF
PB10#*M100QMGLB	100	Quad	MH	HX-HPF
PB10#*P150QMDLB	150	Quad	PS	HX-HPF
PB10#*P150QMGLB	150	Quad	PS	HX-HPF

Specify Style: S=Standard, D=Deluxe, P=Premium

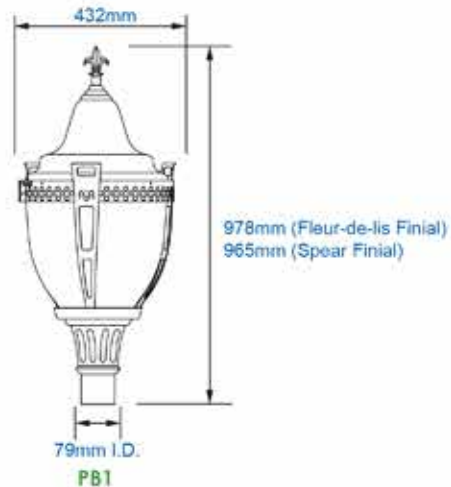
#Specify Globe: 3=Type III, 5=Type V

*Specify Finial: F=Fleur-de-lis, S=Spear



ARRA Compliant

Manufactured in the USA — Sold through our USA Factories.



DIMENSIONS

AL-57

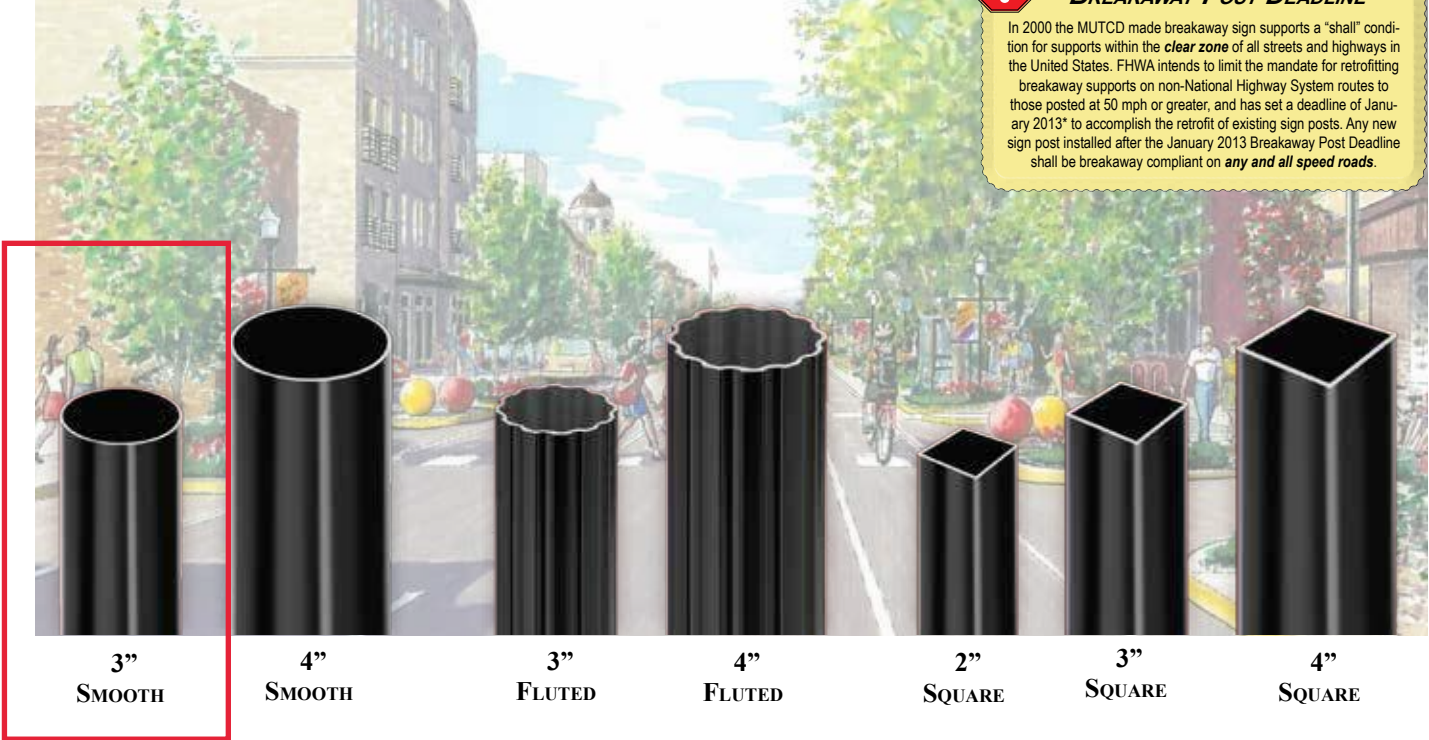
Decorative Sign Posts

Volume Discounts Available...



BREAKAWAY POST DEADLINE

In 2000 the MUTCD made breakaway sign supports a "shall" condition for supports within the *clear zone* of all streets and highways in the United States. FHWA intends to limit the mandate for retrofitting breakaway supports on non-National Highway System routes to those posted at 50 mph or greater, and has set a deadline of January 2013* to accomplish the retrofit of existing sign posts. Any new sign post installed after the January 2013 Breakaway Post Deadline shall be breakaway compliant on *any and all speed roads*.



Signature Streetscapes stocks all our standard post lengths and profiles in a *Tiger Drylac Bengal Gloss Black* powder-coat finish. We also inventory a large amount of mill finish product and can cut custom lengths to meet your job specification as needed. Custom powder-coat colors are available upon request, see page 41 for finish options or call us for more information.

Length:	3" Smooth	4" Smooth	3" Fluted	4" Fluted	2" Square	3" Square	4" Square
8'-0"	SM-0308	SM-0408	FL-0308	FL-0408	SQ-2208	SQ-3308	SQ-4408
10'-0"	SM-0310	SM-0410	FL-0310	FL-0410	SQ-2210	SQ-3310	SQ-4410
12'-0"	SM-0312	SM-0412	FL-0312	FL-0412	SQ-2212	SQ-3312	SQ-4412
14'-0"	SM-0314	SM-0414	FL-0314	FL-0414	SQ-2214	SQ-3314	SQ-4414
16'-0"	SM-0316	SM-0416	FL-0316	FL-0416	SQ-2216	SQ-3316	SQ-4416

CHOOSE YOUR POST LENGTH CAREFULLY. BE SURE TO INCLUDE ENOUGH ROOM FOR ALL SIGN/LIGHTING COMPONENTS INCLUDING A MINIMUM DIRECT BURIAL DEPTH OF 24-30"

Post installation methods...

V-Loc Breakaway

For use in clear zones to make 3" & 4" Smooth and Fluted tubing breakaway compliant



Direct Burial Posts

Designed for use with concrete installation. We recommend 24" of post burial. Size and depth of concrete varies according to local soil conditions. Concrete foundations should extend above ground level and be larger in diameter than the base, to prevent damage and ensure the finish will be protected for years to come.



Surface Mount Posts

Designed to be used when pole is mounted above grade and fastened with anchors or "J-bolts" in concrete. Fasteners are cast integral with foundation. Call ahead and we can send a hole placement template to match the bolt patterns on our surface mounted bases for use when pouring concrete footers.



See page 34

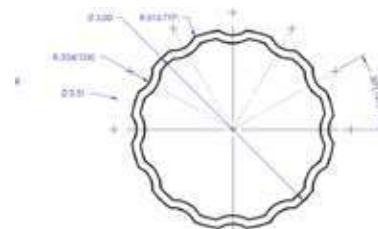
Bulk Post Pricing, call for volume discounts



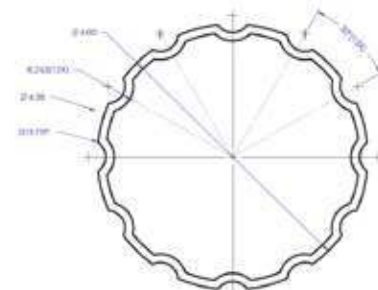
Signature Streetscapes offers significant discounts on both powder coated and mill finish (raw/uncoated) material when ordered in bulk. Call our customer service department for more information on placing high volume orders. Custom lengths also available upon request.

Length:	Wall Thickness	Lbs. / Ft.
3" SMOOTH	.120	1.300
3" FLUTED	.120	1.340
4" SMOOTH	.125	1.826
4" FLUTED	.125	1.910
2" SQUARE	.125	1.091
3" SQUARE	.125	1.673
4" SQUARE	.125	2.555

All material made from alloy 6063 aluminum



3" DIAMETER FLUTED



4" DIAMETER FLUTED



NEED SPECIAL HARDWARE?

We understand that when building custom sign fixtures that sometimes the standard hardware package may not always fit your needs. It is important to us that when your products arrive everything required to properly mount your sign is included in shipping. Please let us know at the time of order if you have any specific hardware or mounting style requirements. In almost all cases we can suggest and provide hardware and mounting solutions to fit your needs.

Sign Post Hardware & Accessories



J-BOLTS

Used for surface mounted poles and lighting applications



DEEP GREEN STEEL U-CHANNEL POSTS

Green enamel finish steel posts are an economical option for mounting street name and traffic signs. Can be used with a variety of hardware options.



Price per Bolt	8'-0"	10'-0"	12'-0"	10'-0"	12'-0"	Rain Cap	Dome Cap
J-BOLT	U-CHANNEL-8	U-CHANNEL-10	U-CHANNEL-12	GAL-10	GAL-12	FN-RC	FN-DC



BREAKAWAY COUPLER

Snap n' Safe breakaway hardware for 3" diameter steel posts



BREAKAWAY BOLTS

Galvanized steel bolts for creating breakaway approved surface mounted posts



V-LOC BREAKAWAY POST ANCHOR SYSTEM

FHWA approved breakaway options for a variety of post styles including our fluted and smooth aluminum sign poles shown on page 16.



SNAP N' SAFE BREAKAWAY PRODUCTS

We carry a wide range of breakaway hardware options. Order directly from our website or call our customer service department for assistance in placing your order.

3" OD Post	#4 x 6" Galvanized	Earth, Asphalt & Concrete Installations	For Square, Round & U-Channel Posts
S300R	DENT	CALL FOR DETAILS	CALL FOR DETAILS

ENTRANCEWAYS



RED BOXES INDICATE
ARCHITECT'S SELECTIONS.

**INTRODUCE YOUR HOME WITH
UNCOMMON ELEGANCE.**



Custom Springline™ shown in mahogany* with custom sidelights, transoms and grilles.

*Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.
Hardware by others unless noted.



Handcrafted from the finest wood available, Andersen® entranceways introduce your home with uncommon elegance. They showcase artistry, intricacy and exceptional beauty to complement the character of your home and those who live inside. For more information, visit andersenwindows.com/entrydoors.

Dramatic shapes and sizes enhance your home’s architecture.

A wide variety of glass options offer efficiency and beauty.

Decorative glass options available.

Grilles in standard or custom patterns.

Optional handle hardware in a variety of styles and finishes.

Choose from the very finest grades of oak, maple, cherry, pine, mahogany*, alder and vertical grain Douglas fir or for low maintenance, select an extruded aluminum-clad exterior to complement your home’s exterior.

Stunning sidelights and transoms open a home to light and add a dramatic flair.

CONTENTS

Straightline	4
Arts & Crafts	7
Sidelights & Transoms	8
Arch	10
Gothic & Elliptical	13
Springline™	14
Sidelights & Transoms	16
Features & Options	17
Wood Species	18
Hardware	20
Grilles & Art Glass	22

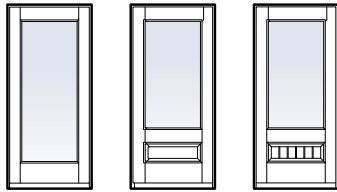
*Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.



Custom Straightline door shown with custom sidelights and colonial grilles in vertical grain Douglas fir with custom white interiors. Covington™ hardware.

Straightline

Straightline Glass Panel



102

181

335



194

179

334

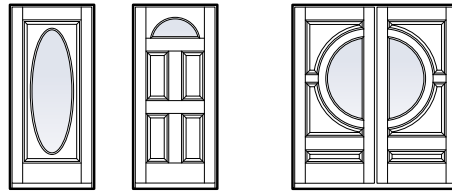


272

704

705

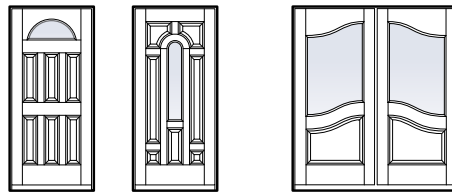
Straightline Curved Glass Panels



207

184

655



209

203

702



201

703



Straightline (201)
Shown in oak.

Arts & Crafts

Most Arts & Crafts entry doors are available in an extensive variety of sizes, including industry-standard widths of 3'0" & 3'6" and heights of 6'8" & 8'0".



Arts & Crafts (403)
Shown in oak with Arts & Crafts art glass pattern.

Arts & Crafts Glass Panels



402

403

404

406



402
with optional
divided light

403
with optional
divided light

404
with optional
divided light

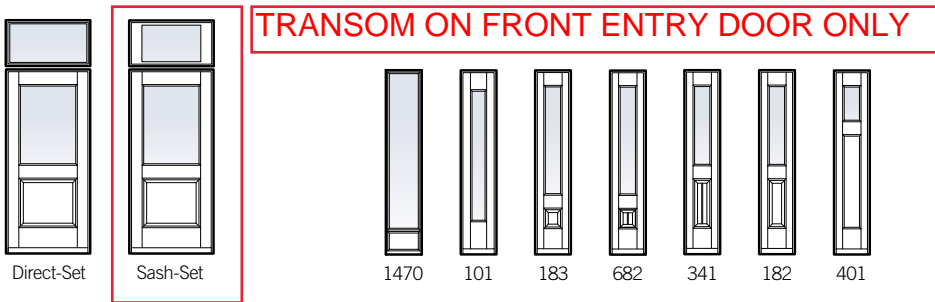
406
with optional
divided light

Sidelights & Transoms

To provide a seamless alignment with Straightline or Arts and Crafts style entry doors, sidelights and transoms are available with the glass built directly into the frame (direct-set) or with glass aligned to the door stiles and rails (sash-set). Sash-set transoms are available with a single or double sash.

Straightline Transoms

Straightline Sidelights

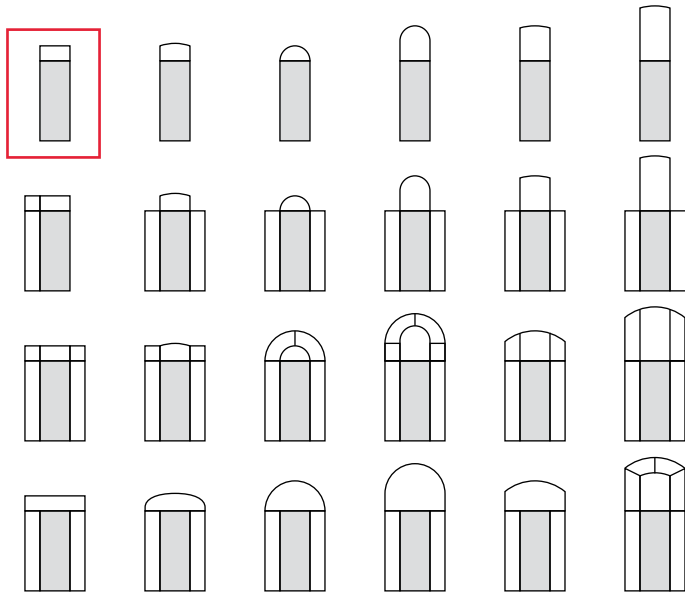


Left: Straightline (193) shown in mahogany* with sidelights (183), beveled glass and custom grilles. Elliptical transom with custom art glass.
 Right: Straightline (181) shown with sidelights (183), transom and custom grilles with white interiors. Hardware by others unless noted.
 *Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.



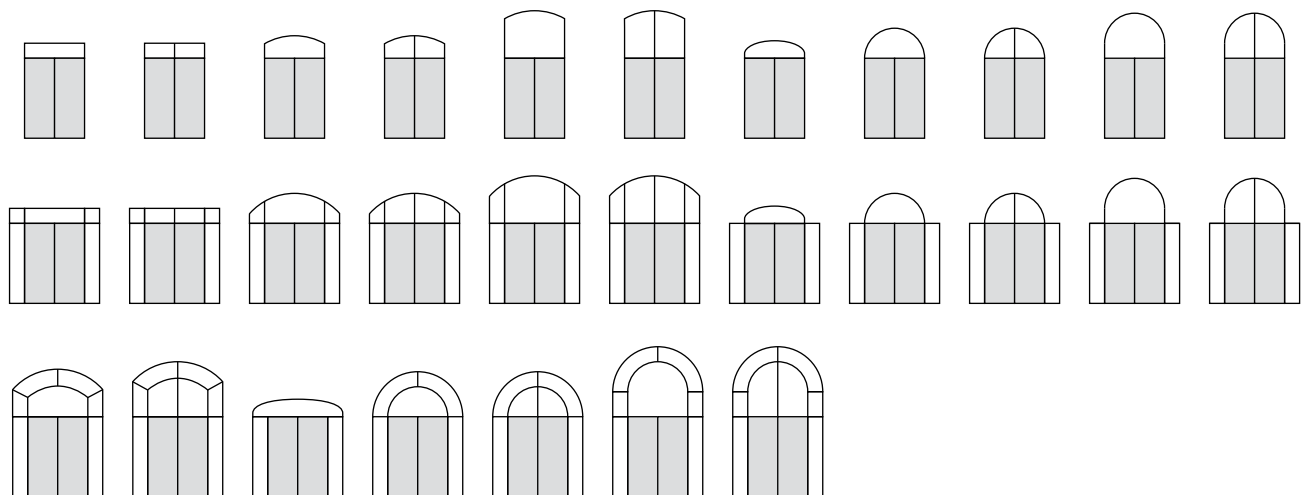
Sidelights and transoms can complement an entry door or completely transform the look of the entire home. These charts demonstrate the range of configurations available for rectangular single and double doors. Sidelights and transoms can be used in nearly any combination, allowing arched openings to be filled with rectangular doors and arched transoms, and creating a world of possibilities for what was once a simple doorway.

Single Door Configurations



Straightline (334) with sidelights (341)
Shown in oak.

Double Door Configurations





Hardware

Andersen® entry doors give you a multitude of hardware options. They can be predrilled for handle sets, knob sets and lever sets to accommodate most architectural styles and most manufacturers' designs. You can also choose lock and trim sets to match your Andersen window and door hardware. With the exception of our Tribeca® and Albany styles, all are forged from the finest brass and finished in brass, bronze, chrome or nickel. Tribeca and Albany hardware is made from die cast zinc with low-maintenance finishes. All Andersen lock sets work with both single-point locking systems and multi-point locking systems, which secure the door panel at the top, middle and bottom.

Hinges

Standard ball-bearing hinges are available in stainless steel, white, polished brass and dark bronze.



After Market Hardware

For hardware manufactured by others, doors can be ordered predrilled for easy on-site installation. They can also be specified without hardware drilling.

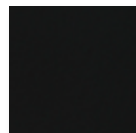
Hardware Options



Hardware Finishes



Antique Brass



Black



Bright Brass



Brushed Chrome



Distressed Bronze



Distressed Nickel



Gold Dust



Oil Rubbed Bronze



Polished Chrome



Satin Nickel



Stone



White

FSB® Hardware

Durable, stainless steel FSB hinged door hardware features clean lines and a sleek satin finish for a thoroughly modern look. Choose from four handle styles.



Satin Stainless Steel



1035



1075



1076



1102

Grilles

Grille Patterns

Andersen can provide just the right grilles to enhance any shape or style of entranceway. You can choose a recognized pattern, such as Colonial, Prairie or Renaissance, recreate a specific design or have our designers work with you to craft a signature look.



Colonial

Prairie



Renaissance

Custom

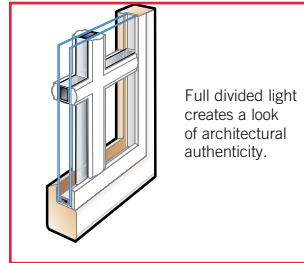


Custom

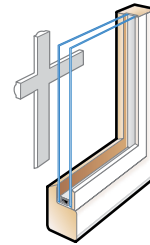
Custom

Configurations

Full divided light includes grilles on the interior and exterior of the entranceway. It is available with spacer between the glass panes for an authentic divided light appearance. For ease of cleaning, a simple removable interior grille is also offered.



Full divided light creates a look of architectural authenticity.



Removable interior grille makes cleaning easy.

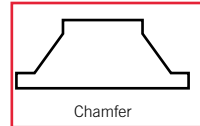
Profiles & Widths

Grilles are available in two standard profiles — Chamfer and Roman Ogee.

All profiles are available in five standard widths: 3/4", 1/8", 1 1/8", 1 1/2" and 2 1/4".



Roman Ogee



Chamfer



Straightline (18)

Shown in cherry.

Hardware by others unless noted.



The Environment has a Business Partner.

Respect for the environment is nothing new at Andersen. For more than a century, it's been part of who we are. Our commitment to recycle and reclaim materials began simply because it was good business. Now it's part of our commitment to sustainability and responsible stewardship of all our resources. Andersen is committed to providing you with long-lasting,* energy-efficient windows and doors. Visit andersenwindows.com/sustainability for more information.



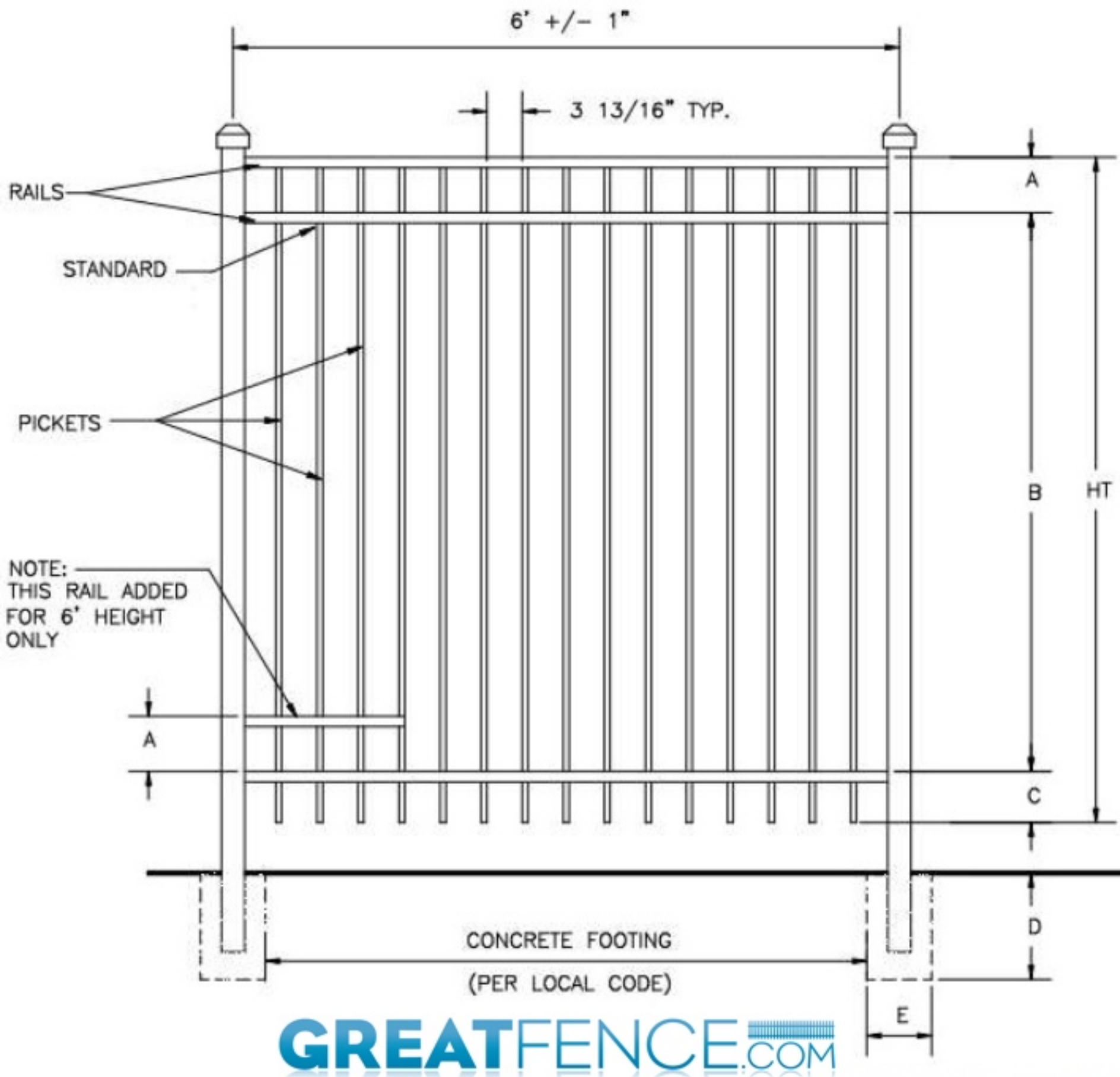
Andersen makes windows and doors with options that make them ENERGY STAR® v. 6.0 certified throughout the U.S.



Andersen is a charter member of the **U.S. Green Building Council** and a strong supporter of its LEED® (Leadership in Energy and Environmental Design) National Green Building Standard rating system.



*Visit andersenwindows.com/warranty for details.
All trademarks where denoted are marks of their respective owners.
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ADDING RINGS TO YOUR FENCE PANEL DECREASES "A"

DIMENSIONS					
HT	A	B	C	D	E
3'	6"	24 1/2"	5 1/2"	PER LOCAL CODE	
3 1/2'	6"	30 1/2"	5 1/2"	PER LOCAL CODE	
4'	6"	36 1/2"	5 1/2"	PER LOCAL CODE	
5'	6"	48 1/2"	5 1/2"	PER LOCAL CODE	
6'	6"	60 1/2"	5 1/2"	PER LOCAL CODE	

SPECIFICATIONS RESIDENTIAL	
POSTS	2"x2"x.060 WALL 2"x2"x.125 WALL 2 1/2"x2 1/2"x.100 WALL
HORIZONTAL RAILS SIDE WALLS TOP WALLS	1 1/8" x 1" .082" .062"
PICKETS PICKET SPACING	5/8"x5/8"x.050 WALL 3 13/16"
AVAILABLE HEIGHTS	3, 3 1/2, 4, 5 & 6 FT.



GreatFence.com



Residential - Style 4



White Gloss

**Hunter Green
Gloss**

White Satin (flat)

**Bronze Satin
(flat)**

**Sandstone
Gloss**

**Bronze
Gloss**

Gold Gloss

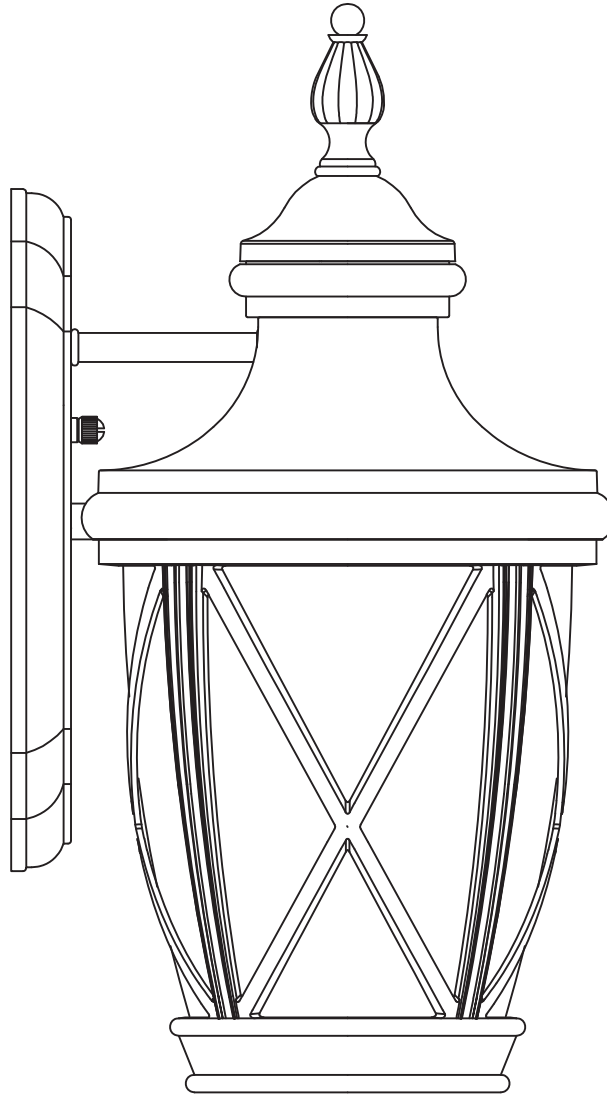
**Khaki Satin
(flat)**

Black Gloss

**Black Satin
(flat)**

allen + roth®

welcoming • sophisticated • inspiring



allen + roth® is a registered trademark of LF, LLC. All Rights Reserved.

ITEM #0616263

WALL LANTERN

MODEL #39472



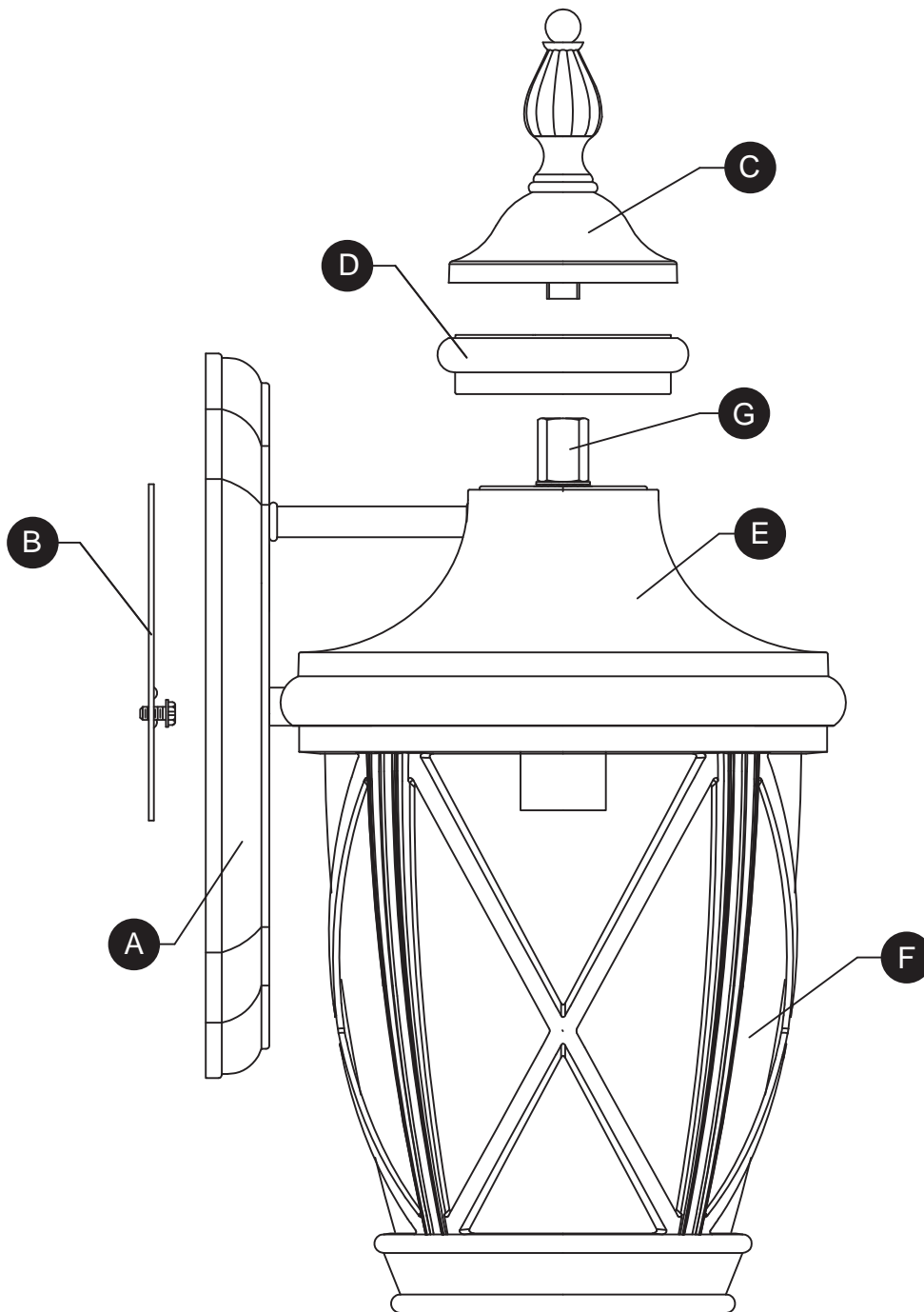
Français p. 9
Español p. 17

ATTACH YOUR RECEIPT HERE

Serial Number _____ Purchase Date _____

Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 1-866-439-9800, 8 a.m. – 6 p.m., EST, Monday - Thursday, 8 a.m. – 5 p.m., EST, Friday.

PACKAGE CONTENTS



PART	DESCRIPTION	QUANTITY
A	Canopy (preassembled to Fixture (E))	1
B	Mounting Bracket	1
C	Fixture Top	1
D	Decorative Ring	1
E	Fixture	1
F	Shade (preassembled to Fixture (E))	1
G	Coupling (preassembled to Fixture (E))	1

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

RED BOXES INDICATE ARCHITECT'S SELECTIONS

400 Series
Tilt-Wash Double-Hung
Full-Frame Windows

SECTION REFERENCE

Tables of Sizes	78-81
Specifications	79-83
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Grille Patterns	85
Window Details	85-86
Joining Details.....	86
Narroline® Conversion Kit.....	87
Combination Designs	181
Product Performance.....	194

CUSTOM SIZING
in 1/8" (3) increments



Dimensions in parentheses are in millimeters.

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

FEATURES

Frame

A Exterior outer frame members are covered with a Perma-Shield® rigid vinyl cladding, minimizing maintenance and providing an attractive appearance.

B For exceptional long-lasting* performance, sill members are constructed with a wood core and a Fibrex® material exterior. Sill ends are protected and sealed with weather-resistant covers.

C Natural wood stops are available in pine and prefinished white, dark bronze and black.** A new, taller sill stop increases performance to PG40 while still maintaining egress on our most popular sizes.

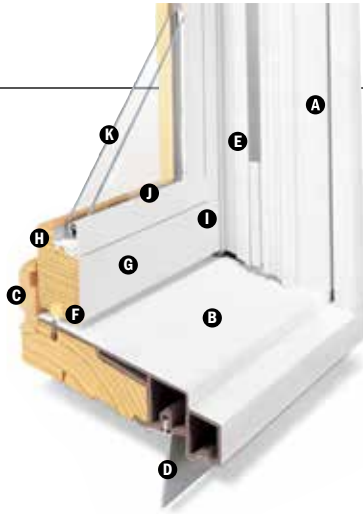
D A factory-applied rigid vinyl anchoring flange on the head, sill and sides of the outer frame helps secure the unit to the structure.

E An extruded rigid vinyl jamb liner and fin provide a protective seal against the outer frame members. Exclusive slide wash assists make it easy to tilt sash into wash mode position.



Unique block-and-tackle balancers feature sized-to-the-unit, rust-resistant springs that require no adjustment. Glass-reinforced nylon balancer shoes provide smooth, reliable sash operation. Sash can be removed, without tools, for drywall pass-through. Jamb liners are available in white or gray and must be specified when ordering. Contact your Andersen supplier for details.

F Weatherstrip throughout the unit provides a long-lasting, energy-efficient, weather-resistant seal. For the top and bottom rails, an encased foam material is used. The head jamb liner and sill have a rigid vinyl rib that the weatherstrip material compresses against. At the meeting rail, compressible vinyl bulb material is used. Side jamb liners use leaf-type weatherstrip with foam inserts.



Sash

Wash assists make it easy to tilt the sash into wash mode.

H Wood sash members are treated with a water-repellent preservative for long-lasting* protection and performance. Interior surfaces are unfinished pine. Low-maintenance prefinished white interiors are also available.

G A polyester-stabilized coat with a Flexacron® finish is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous finish.

I Sash joints simulate the look of traditional mortise-and-tenon construction inside and out.

Glass

J Silicone bed glazing provides superior weathertightness and durability.

K High-Performance glass options include:

- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 Sun glass
- Low-E4 SmartSun™ glass
- Low-E4 SmartSunHeatLock glass

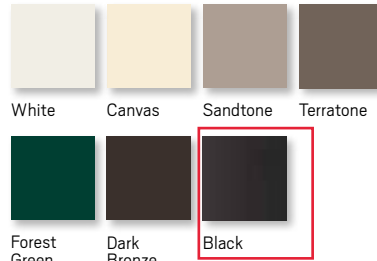
Tempered glass and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction and simplifies finishing at the jobsite.

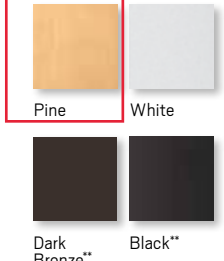
Patterned Glass

Patterned glass options are available. See page 12 for more details.

EXTERIOR

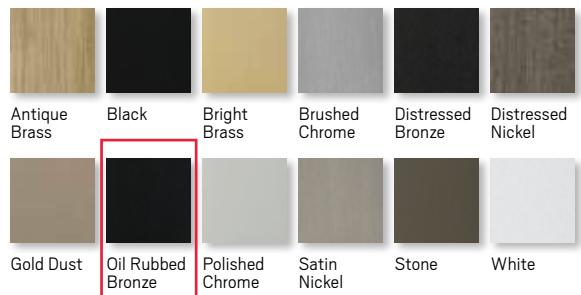


INTERIOR



Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a prefinished option is specified.

HARDWARE FINISHES



Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

DOUBLE-HUNG HARDWARE

STANDARD Lock & Keeper



Black | Gold Dust | **Stone** | White
Stone is standard with natural interior units. White comes with prefinished white interiors. Other finishes optional.

OPTIONAL DOUBLE-HUNG HARDWARE**

ESTATE™ Lock & Keeper



Optional Estate lock & keeper reduces the clear opening height by 3/16" (14). Check with local building code officials to determine compliance with egress requirements.

CONTEMPORARY Bar Lift



Antique Brass | Black | Bright Brass
Brushed Chrome | Distressed Bronze
Distressed Nickel | Gold Dust
Oil Rubbed Bronze | Polished Chrome
Satin Nickel | Stone | White

TRADITIONAL



Antique Brass | Black | Bright Brass | Brushed Chrome | Distressed Bronze | Distressed Nickel
Gold Dust | **Oil Rubbed Bronze** | Polished Chrome | Satin Nickel | Stone | White

Bold name denotes finish shown.

* Visit andersenwindows.com/warranty or for details.

** Dark bronze and black interiors are only available with dark bronze and black exteriors respectively.

Flexacron® is a registered trademark of PPG Industries, Inc.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

StormWATCH
PROTECTION

400 Series tilt-wash double-hung full-frame windows are available with Stormwatch® Protection. Visit andersenwindows.com/coastal for more details.

Performance Grade (PG) Upgrade

A high inside sill stop* with exterior sill brackets and hidden interior brackets are available to provide additional structural support for tilt-wash units, allowing standard glass units to achieve higher performance grade ratings. Performance Grade (PG) Ratings are more comprehensive than Design Pressure (DP) Ratings for measuring product performance. Use of this option will subtract 3/8" (15) from clear opening height. PG Upgrade not available for 72" (1829) and 76" (1930) heights. Contact your Andersen supplier for availability. For up-to-date performance information of individual products, please visit andersenwindows.com.

Sash Options



Cottage

Reverse Cottage

For more information about glass, patterned glass, art glass, grilles and TruScene insect screens, see pages 12-14.

For more information about combination designs, product performance, installation instructions and accessories, see pages 181-211 or visit andersenwindows.com.

ACCESSORIES Sold Separately

Frame

Extension Jamb



Standard jamb depth is 4 1/2" (114). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in 1/16" (1.5) increments between 5 1/4" (129) and 7 1/8" (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Pine Stool



A clear pine stool is available and ready for finishing. The tilt-wash stool is available in 4 9/16" (116) for use in wall depths up to 5 1/4" (133) and 6 3/16" (167) for use in wall depths up to 7 1/8" (181). Works with 2 1/4" (57) and 2 1/2" (64) wide casings.

Hardware

Window Opening Control Device



A recessed window opening control device is available factory applied. It limits the sash travel to less than 4" (102) when the window is first opened. Available in stone, white and black. A field-applied window opening control device is also available.

Grilles

Grilles are available in a variety of configurations and widths. For double-hung grille patterns, see page 84.

Security Sensors

VeriLock® Sensors

VeriLock sensors are available in five colors. See page 15 for details.

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 15 for details.

Glass

Andersen® Art Glass

Available for 400 Series tilt-wash transom and picture units. Andersen art glass panels come in a variety of original patterns. See pages 173-174 for details on Andersen art glass. Visit andersenwindows.com/artglass for details and pattern information.

Storm/Insect Screen Combination Unit**



A self-storing storm window combined with an insect screen provides greater energy efficiency, while allowing ventilation when needed.

Constructed with an aluminum frame, single-pane upper and lower glass panels and charcoal powder-coated aluminum screen mesh. Available in white, Sandtone and Terratone to match product exteriors. Canvas, forest green, dark bronze and black available by special order.

Combination units can improve Sound Transmission Class (STC) and Outdoor Indoor Transmission Class (OITC) ratings. Ideal for projects near airports, busy roadways or other noisy environments.

For example, adding a combination unit to a 400 Series tilt-wash double-hung (3862) unit with Low-E4® glass will improve its STC rating from 26 to 32. Contact your Andersen supplier for additional STC and OITC rating information.

Insect Screens

Insect Screen Frames



Full and half insect screens are available for most unit sizes. Frame colors match product exteriors. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Not available on windows with Stormwatch Protection.

TruScene® Insect Screen

Exclusive Andersen TruScene insect screens provide over 50% more clarity than our conventional insect screens for a beautiful unobstructed view. They allow more fresh air and sunlight in, while doing a better job of keeping out small insects.

Conventional Insect Screen

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

Exterior Trim

This product is available with Andersen exterior trim. See pages 175-180 for details.

CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- Do not paint 400 Series windows with white, canvas, Sandtone, forest green, dark bronze or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

* Infringes on the overall net clear opening. Unit clear operable area may not meet egress requirements. See your local building code official for more information.

** Do not add combination units to windows with Low-E4 Sun glass, unless window glass is tempered. Combination units may also reduce the overall clear operable area of the window. See your local code official for egress requirements in your area.

† Values are based on comparison of Andersen double-hung window conversion kit U-Factor to the U-Factor for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables. Dimensions in parentheses are in millimeters.

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

SIZES TO BE VERIFIED BY CONTRACTOR

Table of Tilt-Wash Double-Hung Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-9 5/8"	2'-1 5/8"	2'-5 5/8"	2'-7 5/8"	2'-9 5/8"	2'-11 5/8"	3'-1 5/8"	3'-5 5/8"	3'-9 5/8"
	(549)	(651)	(752)	(803)	(854)	(905)	(956)	(1057)	(1159)
Minimum Rough Opening	1'-10 1/8"	2'-2 1/8"	2'-6 1/8"	2'-8 1/8"	2'-10 1/8"	3'-0 1/8"	3'-2 1/8"	3'-6 1/8"	3'-10 1/8"
	(562)	(664)	(765)	(816)	(867)	(917)	(968)	(1070)	(1172)
Unobstructed Glass (lower sash only)	15"	19"	23"	25"	27"	29"	31"	35"	39"
	(381)	(483)	(584)	(635)	(686)	(737)	(787)	(889)	(991)



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

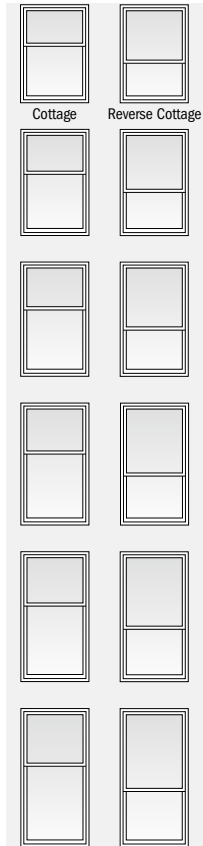
Grille patterns shown on page 85.

Cottage or reverse cottage sash ratio available for heights shown below in all widths.

CUSTOM WIDTHS – 21 5/8" to 45 5/8"

CUSTOM HEIGHTS – 48 1/8" to 76 1/8"

Window Dimension	CUSTOM WIDTHS – 21 5/8" to 45 5/8"									
	21 5/8"	24 1/8"	26 5/8"	29 1/8"	31 5/8"	34 1/8"	36 5/8"	39 1/8"	41 5/8"	45 5/8"
3'-0 7/8"	TW18210	TW20210	TW24210	TW26210	TW28210	TW210210	TW30210	TW34210	TW38210	
3'-4 7/8"	TW1832	TW2032	TW2432	TW2632	TW2832	TW21032	TW3032	TW3432	TW3832	
3'-8 7/8"	TW1836	TW2036	TW2436	TW2636	TW2836	TW21036	TW3036	TW3436	TW3836	
4'-0 7/8"	TW18310	TW20310	TW24310	TW26310	TW28310	TW210310	TW30310	TW34310	TW38310	
4'-4 7/8"	TW1842	TW2042	TW2442	TW2642	TW2842	TW21042	TW3042	TW3442	TW3842	
4'-8 7/8"	TW1846	TW2046	TW2446	TW2646	TW2846	TW21046	TW3046 ^o	TW3446 ^o	TW3846 ^o	
5'-0 7/8"	TW18410	TW20410	TW24410	TW26410	TW28410	TW210410 ^o	TW30410 ^o	TW34410 ^o	TW38410 ^o	
5'-4 7/8"	TW1852	TW2052	TW2452	TW2652	TW2852 ^o	TW21052 ^o	TW3052 ^o	TW3452 ^o	TW3852 ^o	
5'-8 7/8"	TW1856	TW2056	TW2456	TW2656 ^o	TW2856 ^o	TW21056 ^o	TW3056 ^o	TW3456 ^o	TW3856 ^o	
6'-0 7/8"	TW18510	TW20510	TW24510 ^o	TW26510 ^o	TW28510 ^o	TW210510 ^o	TW30510 ^o	TW34510 ^o	TW38510 ^o	
6'-4 7/8"	TW1862	TW2062	TW2462 ^o	TW2662 ^o	TW2862 ^o	TW21062 ^o	TW3062 ^o	TW3462 ^o	TW3862 ^o	



Size tables for windows with cottage or reverse cottage sash are available at andersenwindows.com/sizing.

- "Window Dimension" always refers to outside frame to frame dimension.
- "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
- Dimensions in parentheses are in millimeters.
- Meet or exceed clear opening area of 5.7 sq.ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 82-83.

continued on next page

Table of Tilt-Wash Double-Hung Window Sizes (continued)

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-9 5/8" (549)	2'-1 5/8" (651)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-1 5/8" (956)	3'-5 5/8" (1057)	3'-9 5/8" (1159)
Minimum Rough Opening	1'-10 1/8" (562)	2'-2 1/8" (664)	2'-6 1/8" (765)	2'-8 1/8" (816)	2'-10 1/8" (867)	3'-0 1/8" (917)	3'-2 1/8" (968)	3'-6 1/8" (1070)	3'-10 1/8" (1172)
Unobstructed Glass (lower sash only)	15" (381)	19" (483)	23" (584)	25" (635)	27" (686)	29" (737)	31" (787)	35" (889)	39" (991)

CUSTOM WIDTHS – 21 5/8" to 45 5/8"

CUSTOM HEIGHTS – 36 7/8" to 92 7/8"

TW1872	TW2072 [◊]	TW2472 [◊]	TW2672 [◊]	TW2872 [◊]	TW21072 [◊]	TW3072 [◊]	TW3472 [◊]	TW3872 [◊]
TW1876	TW2076 [◊]	TW2476 [◊]	TW2676 [◊]	TW2876 [◊]	TW21076 [◊]	TW3076 [◊]	TW3476 [◊]	TW3876 [◊]



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

Windows 7'-4 7/8" (2257) and 7'-8 7/8" (2359) high have interior and exterior brackets. Interior brackets, located on both sides of the meeting rail, must be flipped up for proper product performance. Andersen® reinforced joining materials must be used when vertically joining 7'-4 7/8" (2257) and 7'-8 7/8" (2359) height windows.

Grille patterns shown on page 85.

* "Window Dimension" always refers to outside frame to frame dimension.
 • "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
 • Dimensions in parentheses are in millimeters.
 ◊ Meet or exceed clear opening area of 5.7 sq.ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 82-83.

Tilt-Wash Transom Window Area Specifications

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
TWT1810	0.56 (0.05)	1.80 (0.17)
TWT1815	1.32 (0.12)	2.90 (0.27)
TWT1817	1.52 (0.14)	3.20 (0.30)
TWT18111	1.94 (0.18)	3.80 (0.35)
TWT1821	2.15 (0.20)	4.10 (0.38)
TWT1823	2.35 (0.22)	4.40 (0.41)
TWT1827	2.77 (0.26)	5.00 (0.47)
TWT1831	3.39 (0.32)	5.90 (0.55)
TWT2010	0.70 (0.07)	2.14 (0.20)
TWT2015	1.67 (0.16)	3.44 (0.32)
TWT2017	1.93 (0.18)	3.79 (0.35)
TWT20111	2.46 (0.23)	4.50 (0.42)
TWT2021	2.72 (0.25)	4.86 (0.45)
TWT2023	2.98 (0.28)	5.22 (0.49)
TWT2027	3.51 (0.33)	5.93 (0.55)
TWT2031	4.30 (0.40)	7.00 (0.65)
TWT2410	0.85 (0.08)	2.47 (0.23)
TWT2415	2.02 (0.19)	3.97 (0.37)
TWT2417	2.34 (0.22)	4.38 (0.41)
TWT24111	2.98 (0.28)	5.21 (0.48)
TWT2421	3.29 (0.31)	5.62 (0.52)
TWT2423	3.61 (0.34)	6.03 (0.56)
TWT2427	4.25 (0.40)	6.85 (0.64)
TWT2431	5.21 (0.48)	8.09 (0.75)
TWT2610	0.93 (0.09)	2.64 (0.25)
TWT2615	2.19 (0.20)	4.24 (0.39)
TWT2617	2.54 (0.24)	4.68 (0.44)

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
TWT26111	3.23 (0.30)	5.56 (0.52)
TWT2621	3.58 (0.33)	6.00 (0.56)
TWT2623	3.93 (0.37)	6.44 (0.60)
TWT2627	4.62 (0.43)	7.32 (0.68)
TWT2631	5.66 (0.53)	8.63 (0.80)
TWT2810	1.00 (0.09)	2.80 (0.26)
TWT2815	2.37 (0.22)	4.51 (0.42)
TWT2817	2.74 (0.26)	4.98 (0.46)
TWT28111	3.49 (0.32)	5.91 (0.55)
TWT2821	3.87 (0.36)	6.38 (0.59)
TWT2823	4.24 (0.39)	6.84 (0.64)
TWT2827	4.99 (0.46)	7.78 (0.72)
TWT2831	6.12 (0.57)	9.18 (0.85)
TWT21010	1.07 (0.10)	2.97 (0.28)
TWT21015	2.55 (0.24)	4.78 (0.44)
TWT21017	2.95 (0.27)	5.27 (0.49)
TWT210111	3.75 (0.35)	6.26 (0.58)
TWT21021	4.15 (0.39)	6.76 (0.63)
TWT21023	4.56 (0.42)	7.25 (0.67)
TWT21027	5.36 (0.50)	8.24 (0.77)
TWT21031	6.57 (0.61)	9.73 (0.90)
TWT3010	1.15 (0.11)	3.14 (0.29)
TWT3015	2.72 (0.25)	5.05 (0.47)
TWT3017	3.15 (0.29)	5.57 (0.52)
TWT30111	4.01 (0.37)	6.61 (0.61)
TWT3021	4.44 (0.41)	7.14 (0.66)
TWT3023	4.87 (0.45)	7.66 (0.71)

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
TWT3027	5.73 (0.53)	8.70 (0.81)
TWT3031	7.02 (0.65)	10.27 (0.95)
TWT3410	1.30 (0.12)	3.47 (0.32)
TWT3415	3.07 (0.29)	5.58 (0.52)
TWT3417	3.56 (0.33)	6.16 (0.57)
TWT34111	4.53 (0.42)	7.32 (0.68)
TWT3421	5.02 (0.47)	7.89 (0.73)
TWT3423	5.50 (0.51)	8.47 (0.79)
TWT3427	6.47 (0.60)	9.63 (0.90)
TWT3431	7.93 (0.74)	11.36 (1.06)
TWT3810	1.45 (0.14)	3.80 (0.35)
TWT3815	3.42 (0.32)	6.12 (0.57)
TWT3817	3.97 (0.37)	6.75 (0.63)
TWT38111	5.05 (0.47)	8.02 (0.75)
TWT3821	5.59 (0.52)	8.65 (0.80)
TWT3823	6.13 (0.57)	9.29 (0.86)
TWT3827	7.21 (0.67)	10.55 (0.98)
TWT3831	8.84 (0.82)	12.46 (1.16)
TWT31010	1.51 (0.14)	3.94 (0.37)
TWT4210	1.66 (0.15)	4.28 (0.40)
TWT41010	1.95 (0.18)	4.94 (0.46)
TWT5610	2.25 (0.21)	5.61 (0.52)
TWT6210	2.55 (0.24)	6.28 (0.58)

* Dimensions in parentheses are in square meters.

400 Series
Tilt-Wash Double-Hung
Full-Frame Windows

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

Table of Tilt-Wash Transom Window Sizes

Scale 1/8" = 1'-0" (1:96)

Window Dimension	1'-9 5/8"	2'-1 5/8"	2'-5 5/8"	2'-7 5/8"	2'-9 5/8"	2'-11 5/8"	3'-1 5/8"	3'-5 5/8"	3'-9 5/8"	3'-11 5/16"	4'-3 5/16"
	(549)	(651)	(752)	(803)	(854)	(905)	(956)	(1057)	(1159)	(1202)	(1303)
Minimum Rough Opening	1'-10 1/8"	2'-2 1/8"	2'-6 1/8"	2'-8 1/8"	2'-10 1/8"	3'-0 1/8"	3'-2 1/8"	3'-6 1/8"	3'-10 1/8"	3'-11 7/8"	4'-3 7/8"
	(562)	(664)	(765)	(816)	(867)	(917)	(968)	(1070)	(1172)	(1215)	(1318)
Unobstructed Glass	15"	19"	23"	25"	27"	29"	31"	35"	39"	40 11/16"	44 11/16"
	(380)	(482)	(583)	(635)	(685)	(737)	(787)	(888)	(990)	(1033)	(1135)

CUSTOM WIDTHS – 21 5/8" to 75 5/16"

CUSTOM HEIGHTS – 12" to 39 5/16"	CUSTOM WIDTHS – 21 5/8" to 75 5/16"										
	TWT1810	TWT2010	TWT2410	TWT2610	TWT2810	TWT21010	TWT3010	TWT3410	TWT3810	TWT31010	TWT4210
1'-0" (305)											
1'-7 5/16" (491)											
1'-9 5/16" (541)											
1'-9 5/16" (541)											
1'-9 5/16" (541)											
2'-1 5/16" (643)											
2'-1 5/16" (643)											
2'-3 7/8" (694)											
2'-3 7/8" (694)											
2'-3 7/8" (694)											
2'-5 5/16" (745)											
2'-5 5/16" (745)											
2'-5 5/16" (745)											
2'-9 5/16" (846)											
2'-9 5/16" (846)											
2'-9 5/16" (846)											
3'-3 5/16" (999)											
3'-3 5/16" (999)											
3'-3 5/16" (999)											



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

Grille patterns shown on page 85.

* "Window Dimension" always refers to outside frame to frame dimension.
 * "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
 * Dimensions in parentheses are in millimeters.

Tilt-Wash Picture Window Area Specifications

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
DHP10310	2.03 (0.19)	4.07 (0.38)
DHP1042	2.22 (0.21)	4.41 (0.41)
DHP1046	2.42 (0.23)	4.74 (0.44)
DHP10410	2.61 (0.24)	5.07 (0.47)
DHP1052	2.81 (0.26)	5.41 (0.50)
DHP1056	3.01 (0.28)	5.74 (0.53)
DHP10510	3.20 (0.30)	6.07 (0.56)
DHP1062	3.40 (0.32)	6.41 (0.60)
DHP30310	9.38 (0.87)	12.77 (1.19)
DHP3042	10.29 (0.96)	13.82 (1.28)
DHP3046	11.19 (1.04)	14.86 (1.38)
DHP30410	12.10 (1.12)	15.91 (1.48)
DHP3052	13.01 (1.21)	16.95 (1.58)
DHP3056	13.92 (1.29)	18.00 (1.67)
DHP30510	14.83 (1.38)	19.04 (1.77)
DHP3062	15.73 (1.46)	20.09 (1.87)
DHP34310	10.53 (0.98)	14.13 (1.31)
DHP3442	11.54 (1.07)	15.28 (1.42)
DHP3446	12.56 (1.17)	16.44 (1.53)

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
DHP34410	13.58 (1.26)	17.60 (1.64)
DHP3452	14.60 (1.36)	18.75 (1.74)
DHP3456	15.62 (1.45)	19.91 (1.85)
DHP34510	16.64 (1.55)	21.07 (1.96)
DHP3462	17.66 (1.64)	22.22 (2.06)
DHP310310	12.16 (1.13)	16.06 (1.49)
DHP31042	13.33 (1.24)	17.37 (1.61)
DHP31046	14.51 (1.35)	18.69 (1.74)
DHP310410	15.69 (1.46)	20.00 (1.86)
DHP31052	16.87 (1.57)	21.32 (1.98)
DHP31056	18.04 (1.68)	22.63 (2.10)
DHP310510	19.22 (1.79)	23.94 (2.22)
DHP31062	20.40 (1.90)	25.26 (2.35)
DHP42310	13.30 (1.24)	17.42 (1.62)
DHP4242	14.56 (1.35)	18.83 (1.75)
DHP4246	15.88 (1.48)	20.27 (1.88)
DHP42410	17.17 (1.60)	21.69 (2.02)
DHP4252	18.46 (1.72)	23.12 (2.15)
DHP4256	19.75 (1.84)	24.54 (2.28)

Window Number	Glass Area Sq. Ft./ (m ²)	Overall Window Area Sq. Ft./ (m ²)
DHP42510	21.03 (1.95)	25.97 (2.41)
DHP4262	22.32 (2.07)	27.39 (2.55)
DHP410310	15.60 (1.45)	20.13 (1.87)
DHP41042	17.11 (1.59)	21.78 (2.02)
DHP41046	18.62 (1.73)	23.43 (2.18)
DHP410410	20.13 (1.87)	25.07 (2.33)
DHP41052	21.64 (2.01)	26.72 (2.48)
DHP41056	23.15 (2.15)	28.37 (2.64)
DHP410510	24.66 (2.29)	30.02 (2.79)
DHP41062	26.17 (2.43)	31.66 (2.94)
DHP56310	17.89 (1.66)	22.85 (2.12)
DHP5642	19.63 (1.82)	24.72 (2.30)
DHP5646	21.36 (1.98)	26.59 (2.47)
DHP56410	23.09 (2.15)	28.46 (2.64)
DHP5652	24.83 (2.31)	30.33 (2.82)
DHP5656	26.56 (2.47)	32.20 (2.99)
DHP56510	28.29 (2.63)	34.07 (3.17)
DHP5662	30.02 (2.79)	35.93 (3.34)

* Dimensions in parentheses are in square meters.

4'-11 5/16" (1057)	5'-7 5/16" (1710)	6'-3 5/16" (1913)
4'-11 7/8" (1070)	5'-7 7/8" (1724)	6'-3 7/8" (1927)
52 11/16" (905)	60 11/16" (1556)	68 11/16" (1745)

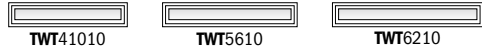


Table of Tilt-Wash Picture Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

Window Dimension	1'-0" (305)	3'-1 5/8" (956)	3'-5 5/8" (1057)	3'-11 5/16" (1202)	4'-3 5/16" (1303)	4'-11 5/16" (1507)	5'-7 5/16" (1710)
Minimum Rough Opening	1'-0 1/2" (318)	3'-2 1/8" (968)	3'-6 1/8" (1070)	3'-11 7/8" (1216)	4'-3 7/8" (1318)	4'-11 7/8" (1521)	5'-7 7/8" (1724)
Unobstructed Glass	7 1/16" (179)	32 11/16" (830)	36 11/16" (932)	42 3/8" (1076)	46 3/8" (1178)	54 3/8" (1381)	62 3/8" (1584)

CUSTOM HEIGHTS – 48 7/8" to 76 7/8"	CUSTOM WIDTHS – 12" to 67 5/16"						
	DHP10310	DHP30310	DHP34310	DHP310310	DHP42310	DHP410310	DHP56310
4'-0 7/8" (1241)							
4'-4 7/8" (1343)							
4'-8 7/8" (1445)							
5'-0 7/8" (1547)							
5'-4 7/8" (1648)							
5'-8 7/8" (1749)							
6'-0 7/8" (1851)							
6'-4 7/8" (1953)							
	DHP1042	DHP3042	DHP3442	DHP31042	DHP4242	DHP41042	DHP5642
	DHP1046	DHP3046	DHP3446	DHP31046	DHP4246	DHP41046	DHP5646
	DHP10410	DHP30410	DHP34410	DHP310410	DHP42410	DHP410410	DHP56410
	DHP1052	DHP3052	DHP3452	DHP31052	DHP4252	DHP41052	DHP5652
	DHP1056	DHP3056	DHP3456	DHP31056	DHP4256	DHP41056	DHP5656
	DHP10510	DHP30510	DHP34510	DHP310510	DHP42510	DHP410510	DHP56510
	DHP1062	DHP3062	DHP3462	DHP31062	DHP4262	DHP41062	DHP5662



Custom-size windows are available in 1/8" (3) increments. See page 84 for custom sizing.

Grille patterns shown on page 85.

• "Window Dimension" always refers to outside frame to frame dimension.
 • "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 210-211 for more details.
 • Dimensions in parentheses are in millimeters.

400 Series
Tilt-Wash Double-Hung
Full-Frame Windows

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

Tilt-Wash Double-Hung Window Opening and Area Specifications

Window Number	Clear Opening Area Sq. Ft./ (m ²)	Clear Opening in Full Open Position		Glass Area Sq. Ft./ (m ²)	Vent Area Sq. Ft./ (m ²)	Top of Subfloor to Top of Inside Sill Stop Inches/(mm)	Overall Window Area Sq. Ft./ (m ²)
		Width Inches/(mm)	Height Inches/(mm)				
TW18210	1.77 (0.16)	17 7/8" (454)	14 1/4" (362)	2.90 (0.27)	1.78 (0.17)	48 1/2" (1231)	5.53 (0.51)
TW1832	2.02 (0.19)	17 7/8" (454)	16 1/4" (412)	3.32 (0.31)	2.03 (0.19)	44 1/2" (1130)	6.14 (0.57)
TW1836	2.26 (0.21)	17 7/8" (454)	18 1/4" (463)	3.74 (0.35)	2.28 (0.21)	40 1/2" (1028)	6.74 (0.63)
TW18310	2.51 (0.23)	17 7/8" (454)	20 1/4" (514)	4.15 (0.39)	2.53 (0.24)	36 1/2" (926)	7.34 (0.68)
TW1842	2.76 (0.26)	17 7/8" (454)	22 1/4" (565)	4.57 (0.43)	2.78 (0.26)	32 1/2" (825)	7.94 (0.74)
TW1846	3.07 (0.29)	17 7/8" (454)	24 3/4" (628)	4.98 (0.46)	3.03 (0.28)	28 1/2" (711)	8.54 (0.79)
TW18410	3.26 (0.30)	17 7/8" (454)	26 1/4" (666)	5.40 (0.50)	3.27 (0.30)	24 1/2" (622)	9.14 (0.85)
TW1852	3.51 (0.33)	17 7/8" (454)	28 1/4" (717)	5.81 (0.54)	3.52 (0.33)	20 1/2" (520)	9.74 (0.91)
TW1856	3.75 (0.35)	17 7/8" (454)	30 1/4" (768)	6.23 (0.58)	3.77 (0.35)	16 1/2" (418)	10.34 (0.96)
TW18510	4.00 (0.37)	17 7/8" (454)	32 1/4" (819)	6.65 (0.62)	4.02 (0.37)	12 1/2" (317)	10.94 (1.02)
TW1862	4.12 (0.38)	17 7/8" (454)	33 1/4" (843)	7.06 (0.66)	4.24 (0.39)	8 1/2" (203)	11.54 (1.07)
TW1872	5.00 (0.46)	17 7/8" (454)	40 1/4" (1022)	8.32 (0.77)	5.03 (0.47)	10 1/4" (260)*	13.35 (1.24)
TW1876	5.24 (0.49)	17 7/8" (454)	42 1/4" (1073)	8.74 (0.81)	5.27 (0.49)	6 1/4" (159)*	13.95 (1.30)
TW20210	2.16 (0.20)	21 7/8" (556)	14 1/4" (362)	3.68 (0.34)	2.18 (0.20)	48 1/2" (1231)	6.56 (0.61)
TW2032	2.47 (0.23)	21 7/8" (556)	16 1/4" (412)	4.21 (0.39)	2.48 (0.23)	44 1/2" (1130)	7.27 (0.68)
TW2036	2.77 (0.26)	21 7/8" (556)	18 1/4" (463)	4.73 (0.44)	2.79 (0.26)	40 1/2" (1028)	7.98 (0.74)
TW20310	3.07 (0.29)	21 7/8" (556)	20 1/4" (514)	5.26 (0.49)	3.09 (0.29)	36 1/2" (926)	8.69 (0.81)
TW2042	3.38 (0.31)	21 7/8" (556)	22 1/4" (565)	5.79 (0.54)	3.40 (0.32)	32 1/2" (825)	9.41 (0.87)
TW2046	3.76 (0.35)	21 7/8" (556)	24 3/4" (628)	6.31 (0.59)	3.71 (0.34)	28 1/2" (711)	10.12 (0.94)
TW20410	3.99 (0.37)	21 7/8" (556)	26 1/4" (666)	6.84 (0.64)	4.00 (0.37)	24 1/2" (622)	10.83 (1.01)
TW2052	4.29 (0.40)	21 7/8" (556)	28 1/4" (717)	7.37 (0.69)	4.31 (0.40)	20 1/2" (520)	11.54 (1.07)
TW2056	4.59 (0.43)	21 7/8" (556)	30 1/4" (768)	7.89 (0.73)	4.61 (0.43)	16 1/2" (418)	12.25 (1.14)
TW20510	4.90 (0.46)	21 7/8" (556)	32 1/4" (819)	8.42 (0.78)	4.92 (0.46)	12 1/2" (317)	12.96 (1.20)
TW2062	5.04 (0.47)	21 7/8" (556)	33 1/4" (843)	8.95 (0.83)	5.18 (0.48)	8 1/2" (203)	13.68 (1.27)
TW2072 ◊	6.11 (0.57)	21 7/8" (556)	40 1/4" (1022)	10.54 (0.98)	6.14 (0.57)	10 1/4" (260)*	15.82 (1.47)
TW2076 ◊	6.42 (0.60)	21 7/8" (556)	42 1/4" (1073)	11.06 (1.03)	6.45 (0.60)	6 1/4" (159)*	16.53 (1.54)
TW24210	2.56 (0.24)	25 7/8" (657)	14 1/4" (362)	4.46 (0.41)	2.58 (0.24)	48 1/2" (1231)	7.58 (0.70)
TW2432	2.92 (0.27)	25 7/8" (657)	16 1/4" (412)	5.09 (0.47)	2.94 (0.27)	44 1/2" (1130)	8.40 (0.78)
TW2436	3.28 (0.31)	25 7/8" (657)	18 1/4" (463)	5.73 (0.53)	3.30 (0.31)	40 1/2" (1028)	9.23 (0.86)
TW24310	3.64 (0.34)	25 7/8" (657)	20 1/4" (514)	6.37 (0.59)	3.66 (0.34)	36 1/2" (926)	10.05 (0.93)
TW2442	4.00 (0.37)	25 7/8" (657)	22 1/4" (565)	7.01 (0.65)	4.02 (0.37)	32 1/2" (825)	10.87 (1.01)
TW2446	4.44 (0.41)	25 7/8" (657)	24 3/4" (628)	7.65 (0.71)	4.39 (0.41)	28 1/2" (711)	11.70 (1.09)
TW24410	4.71 (0.44)	25 7/8" (657)	26 1/4" (666)	8.28 (0.77)	4.74 (0.44)	24 1/2" (622)	12.52 (1.16)
TW2452	5.07 (0.47)	25 7/8" (657)	28 1/4" (717)	8.92 (0.83)	5.10 (0.47)	20 1/2" (520)	13.34 (1.24)
TW2456	5.43 (0.51)	25 7/8" (657)	30 1/4" (768)	9.56 (0.89)	5.46 (0.51)	16 1/2" (418)	14.17 (1.32)
TW24510 ◊	5.79 (0.54)	25 7/8" (657)	32 1/4" (819)	10.20 (0.95)	5.81 (0.54)	12 1/2" (317)	14.99 (1.39)
TW2462 ◊	5.97 (0.55)	25 7/8" (657)	33 1/4" (843)	10.84 (1.01)	6.13 (0.57)	8 1/2" (203)	15.81 (1.47)
TW2472 ◊	7.23 (0.67)	25 7/8" (657)	40 1/4" (1022)	12.76 (1.19)	7.26 (0.68)	10 1/4" (260)*	18.28 (1.70)
TW2476 ◊	7.59 (0.71)	25 7/8" (657)	42 1/4" (1073)	13.40 (1.25)	7.62 (0.71)	6 1/4" (159)*	19.11 (1.78)
TW26210	2.76 (0.26)	27 7/8" (708)	14 1/4" (362)	4.84 (0.45)	2.78 (0.26)	48 1/2" (1231)	8.09 (0.75)
TW2632	3.14 (0.29)	27 7/8" (708)	16 1/4" (412)	5.54 (0.52)	3.17 (0.30)	44 1/2" (1130)	8.97 (0.83)
TW2636	3.53 (0.33)	27 7/8" (708)	18 1/4" (463)	6.23 (0.58)	3.55 (0.33)	40 1/2" (1028)	9.85 (0.92)
TW26310	3.92 (0.36)	27 7/8" (708)	20 1/4" (514)	6.92 (0.64)	3.94 (0.37)	36 1/2" (926)	10.73 (1.00)
TW2642	4.30 (0.40)	27 7/8" (708)	22 1/4" (565)	7.62 (0.71)	4.33 (0.40)	32 1/2" (825)	11.61 (1.08)
TW2646	4.79 (0.44)	27 7/8" (708)	24 3/4" (628)	8.31 (0.77)	4.73 (0.44)	28 1/2" (711)	12.49 (1.16)
TW26410	5.08 (0.47)	27 7/8" (708)	26 1/4" (666)	9.01 (0.84)	5.10 (0.47)	24 1/2" (622)	13.36 (1.24)
TW2652	5.47 (0.51)	27 7/8" (708)	28 1/4" (717)	9.70 (0.90)	5.49 (0.51)	20 1/2" (520)	14.24 (1.32)
TW2656 ◊	5.85 (0.54)	27 7/8" (708)	30 1/4" (768)	10.39 (0.96)	5.88 (0.55)	16 1/2" (418)	15.12 (1.41)
TW26510 ◊	6.24 (0.58)	27 7/8" (708)	32 1/4" (819)	11.09 (1.03)	6.26 (0.58)	12 1/2" (317)	16.00 (1.49)
TW2662 ◊	6.43 (0.60)	27 7/8" (708)	33 1/4" (843)	11.78 (1.09)	6.61 (0.61)	8 1/2" (203)	16.88 (1.57)
TW2672 ◊	7.79 (0.72)	27 7/8" (708)	40 1/4" (1022)	13.86 (1.29)	7.82 (0.73)	10 1/4" (260)*	19.52 (1.81)
TW2676 ◊	8.18 (0.76)	27 7/8" (708)	42 1/4" (1073)	14.56 (1.35)	8.21 (0.76)	6 1/4" (159)*	20.40 (1.89)
TW28210	2.95 (0.27)	29 7/8" (759)	14 1/4" (362)	5.23 (0.49)	2.98 (0.28)	48 1/2" (1231)	8.61 (0.80)
TW2832	3.37 (0.31)	29 7/8" (759)	16 1/4" (412)	5.98 (0.56)	3.39 (0.32)	44 1/2" (1130)	9.54 (0.89)
TW2836	3.78 (0.35)	29 7/8" (759)	18 1/4" (463)	6.73 (0.63)	3.81 (0.35)	40 1/2" (1028)	10.47 (0.97)
TW28310	4.20 (0.39)	29 7/8" (759)	20 1/4" (514)	7.48 (0.70)	4.22 (0.39)	36 1/2" (926)	11.41 (1.06)
TW2842	4.61 (0.43)	29 7/8" (759)	22 1/4" (565)	8.23 (0.77)	4.64 (0.43)	32 1/2" (825)	12.34 (1.15)
TW2846	5.13 (0.48)	29 7/8" (759)	24 3/4" (628)	8.98 (0.83)	5.07 (0.47)	28 1/2" (711)	13.28 (1.23)
TW28410	5.44 (0.51)	29 7/8" (759)	26 1/4" (666)	9.73 (0.90)	5.47 (0.51)	24 1/2" (622)	14.21 (1.32)
TW2852 ◊	5.86 (0.54)	29 7/8" (759)	28 1/4" (717)	10.48 (0.97)	5.88 (0.55)	20 1/2" (520)	15.14 (1.41)

Opening calculations change when using PG Upgrade sill stop. For opening specifications for windows with Stormwatch® Protection, visit andersenwindows.com/openingspecs.

For cottage and reverse cottage sash opening specifications, visit andersenwindows.com/openingspecs.

*Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096) except for 7'-5" and 7'-9" heights which are calculated using a header height of 8" (2438).

*Dimensions in parentheses are in millimeters or square meters.

◊ Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

*Calculated based upon a structural header height of 8" (2438).

continued on next page

Tilt-Wash Double-Hung Window Opening and Area Specifications *(continued)*

Window Number	Clear Opening Area Sq. Ft./ (m ²)	Clear Opening in Full Open Position		Glass Area Sq. Ft./ (m ²)	Vent Area Sq. Ft./ (m ²)	Top of Subfloor to Top of Inside Sill Stop Inches/ (mm)	Overall Window Area Sq. Ft./ (m ²)
		Width Inches/ (mm)	Height Inches/ (mm)				
TW2856 ◊	6.27 (0.58)	29 7/8" (759)	30 1/4" (768)	11.22 (1.04)	6.30 (0.59)	16 1/2" (418)	16.08 (1.49)
TW28510 ◊	6.69 (0.62)	29 7/8" (759)	32 1/4" (819)	11.97 (1.11)	6.71 (0.62)	12 1/2" (317)	17.01 (1.58)
TW2862 ◊	6.89 (0.64)	29 7/8" (759)	33 1/4" (843)	12.72 (1.18)	7.08 (0.66)	8 1/2" (203)	17.95 (1.67)
TW2872 ◊	8.35 (0.78)	29 7/8" (759)	40 1/4" (1022)	14.98 (1.39)	8.38 (0.78)	10 1/4" (260)*	20.75 (1.93)
TW2876 ◊	8.77 (0.81)	29 7/8" (759)	42 1/4" (1073)	15.72 (1.46)	8.80 (0.82)	6 1/4" (159)*	21.69 (2.01)
TW210210	3.15 (0.29)	31 7/8" (809)	14 1/4" (362)	5.62 (0.52)	3.18 (0.30)	48 1/2" (1231)	9.12 (0.85)
TW21032	3.59 (0.33)	31 7/8" (809)	16 1/4" (412)	6.42 (0.60)	3.62 (0.34)	44 1/2" (1130)	10.11 (0.94)
TW21036	4.04 (0.38)	31 7/8" (809)	18 1/4" (463)	7.23 (0.67)	4.06 (0.38)	40 1/2" (1028)	11.10 (1.03)
TW210310	4.48 (0.42)	31 7/8" (809)	20 1/4" (514)	8.03 (0.75)	4.51 (0.42)	36 1/2" (926)	12.09 (1.12)
TW21042	4.92 (0.46)	31 7/8" (809)	22 1/4" (565)	8.84 (0.82)	4.95 (0.46)	32 1/2" (825)	13.08 (1.22)
TW21046	5.48 (0.51)	31 7/8" (809)	24 3/4" (628)	9.64 (0.90)	5.41 (0.50)	28 1/2" (711)	14.07 (1.31)
TW210410 ◊	5.81 (0.54)	31 7/8" (809)	26 1/4" (666)	10.45 (0.97)	5.83 (0.54)	24 1/2" (622)	15.05 (1.40)
TW21052 ◊	6.25 (0.58)	31 7/8" (809)	28 1/4" (717)	11.25 (1.05)	6.28 (0.58)	20 1/2" (520)	16.04 (1.49)
TW21056 ◊	6.69 (0.62)	31 7/8" (809)	30 1/4" (768)	12.06 (1.12)	6.72 (0.62)	16 1/2" (418)	17.03 (1.59)
TW210510 ◊	7.14 (0.66)	31 7/8" (809)	32 1/4" (819)	12.86 (1.20)	7.16 (0.67)	12 1/2" (317)	18.02 (1.67)
TW21062 ◊	7.35 (0.68)	31 7/8" (809)	33 1/4" (843)	13.67 (1.27)	7.55 (0.70)	8 1/2" (203)	19.01 (1.77)
TW21072 ◊	8.91 (0.83)	31 7/8" (810)	40 1/4" (1022)	16.08 (1.49)	8.94 (0.83)	10 1/4" (260)*	21.99 (2.04)
TW21076 ◊	9.35 (0.87)	31 7/8" (810)	42 1/4" (1073)	16.90 (1.57)	9.38 (0.87)	6 1/4" (159)*	22.98 (2.13)
TW30210	3.35 (0.31)	33 7/8" (860)	14 1/4" (362)	6.01 (0.56)	3.38 (0.31)	48 1/2" (1231)	9.63 (0.90)
TW3032	3.82 (0.36)	33 7/8" (860)	16 1/4" (412)	6.87 (0.64)	3.85 (0.36)	44 1/2" (1130)	10.67 (0.99)
TW3036	4.29 (0.40)	33 7/8" (860)	18 1/4" (463)	7.73 (0.72)	4.32 (0.40)	40 1/2" (1028)	11.72 (1.09)
TW30310	4.76 (0.44)	33 7/8" (860)	20 1/4" (514)	8.59 (0.80)	4.79 (0.45)	36 1/2" (926)	12.76 (1.19)
TW3042	5.23 (0.49)	33 7/8" (860)	22 1/4" (565)	9.45 (0.88)	5.26 (0.49)	32 1/2" (825)	13.81 (1.28)
TW3046 ◊	5.82 (0.54)	33 7/8" (860)	24 3/4" (628)	10.31 (0.96)	5.75 (0.53)	28 1/2" (711)	14.85 (1.38)
TW30410 ◊	6.17 (0.57)	33 7/8" (860)	26 1/4" (666)	11.17 (1.04)	6.20 (0.58)	24 1/2" (622)	15.90 (1.48)
TW3052 ◊	6.64 (0.62)	33 7/8" (860)	28 1/4" (717)	12.03 (1.12)	6.67 (0.62)	20 1/2" (520)	16.95 (1.58)
TW3056 ◊	7.11 (0.66)	33 7/8" (860)	30 1/4" (768)	12.89 (1.20)	7.14 (0.66)	16 1/2" (418)	17.99 (1.67)
TW30510 ◊	7.58 (0.70)	33 7/8" (860)	32 1/4" (819)	13.75 (1.28)	7.61 (0.71)	12 1/2" (317)	19.04 (1.77)
TW3062 ◊	7.81 (0.73)	33 7/8" (860)	33 1/4" (843)	14.61 (1.36)	8.03 (0.75)	8 1/2" (203)	20.08 (1.87)
TW3072 ◊	9.47 (0.88)	33 7/8" (860)	40 1/4" (1022)	17.20 (1.60)	9.50 (0.88)	10 1/4" (260)*	23.22 (2.16)
TW3076 ◊	9.94 (0.92)	33 7/8" (860)	42 1/4" (1073)	18.06 (1.68)	9.97 (0.93)	6 1/4" (159)*	24.27 (2.25)
TW34210	3.74 (0.35)	37 7/8" (962)	14 1/4" (362)	6.79 (0.63)	3.78 (0.35)	48 1/2" (1231)	10.65 (0.99)
TW3432	4.27 (0.40)	37 7/8" (962)	16 1/4" (412)	7.76 (0.72)	4.30 (0.40)	44 1/2" (1130)	11.81 (1.10)
TW3436	4.80 (0.45)	37 7/8" (962)	18 1/4" (463)	8.73 (0.81)	4.83 (0.45)	40 1/2" (1028)	12.97 (1.21)
TW34310	5.32 (0.49)	37 7/8" (962)	20 1/4" (514)	9.70 (0.90)	5.35 (0.50)	36 1/2" (926)	14.12 (1.31)
TW3442	5.85 (0.54)	37 7/8" (962)	22 1/4" (565)	10.67 (0.99)	5.88 (0.55)	32 1/2" (825)	15.28 (1.42)
TW3446 ◊	6.51 (0.60)	37 7/8" (962)	24 3/4" (628)	11.64 (1.08)	6.42 (0.60)	28 1/2" (711)	16.43 (1.53)
TW34410 ◊	6.90 (0.64)	37 7/8" (962)	26 1/4" (666)	12.61 (1.17)	6.93 (0.64)	24 1/2" (622)	17.59 (1.63)
TW3452 ◊	7.43 (0.69)	37 7/8" (962)	28 1/4" (717)	13.58 (1.26)	7.46 (0.69)	20 1/2" (520)	18.75 (1.74)
TW3456 ◊	7.95 (0.74)	37 7/8" (962)	30 1/4" (768)	14.55 (1.35)	7.98 (0.74)	16 1/2" (418)	19.90 (1.85)
TW34510 ◊	8.48 (0.79)	37 7/8" (962)	32 1/4" (819)	15.53 (1.44)	8.51 (0.79)	12 1/2" (317)	21.06 (1.96)
TW3462 ◊	8.73 (0.81)	37 7/8" (962)	33 1/4" (843)	16.50 (1.53)	8.98 (0.83)	8 1/2" (203)	22.22 (2.06)
TW3472 ◊	10.59 (0.98)	37 7/8" (962)	40 1/4" (1022)	19.42 (1.80)	10.62 (0.99)	10 1/4" (260)*	25.69 (2.39)
TW3476 ◊	11.11 (1.03)	37 7/8" (962)	42 1/4" (1073)	20.38 (1.89)	11.14 (1.04)	6 1/4" (159)*	26.85 (2.49)
TW38210	4.14 (0.39)	41 7/8" (1064)	14 1/4" (362)	7.56 (0.70)	4.17 (0.39)	48 1/2" (1231)	11.68 (1.09)
TW3832	4.72 (0.44)	41 7/8" (1064)	16 1/4" (412)	8.64 (0.80)	4.76 (0.44)	44 1/2" (1130)	12.94 (1.20)
TW3836	5.30 (0.49)	41 7/8" (1064)	18 1/4" (463)	9.72 (0.90)	5.34 (0.50)	40 1/2" (1028)	14.21 (1.32)
TW38310	5.88 (0.55)	41 7/8" (1064)	20 1/4" (514)	10.81 (1.00)	5.92 (0.55)	36 1/2" (926)	15.48 (1.44)
TW3842	6.47 (0.60)	41 7/8" (1064)	22 1/4" (565)	11.89 (1.11)	6.50 (0.60)	32 1/2" (825)	16.75 (1.56)
TW3846 ◊	7.19 (0.67)	41 7/8" (1064)	24 3/4" (628)	12.97 (1.21)	7.10 (0.66)	28 1/2" (711)	18.01 (1.67)
TW38410 ◊	7.63 (0.71)	41 7/8" (1064)	26 1/4" (666)	14.05 (1.31)	7.66 (0.71)	24 1/2" (622)	19.28 (1.79)
TW3852 ◊	8.21 (0.76)	41 7/8" (1064)	28 1/4" (717)	15.14 (1.41)	8.25 (0.77)	20 1/2" (520)	20.55 (1.91)
TW3856 ◊	8.79 (0.82)	41 7/8" (1064)	30 1/4" (768)	16.22 (1.51)	8.83 (0.82)	16 1/2" (418)	21.62 (2.01)
TW38510 ◊	9.37 (0.87)	41 7/8" (1064)	32 1/4" (819)	17.30 (1.61)	9.41 (0.87)	12 1/2" (317)	23.08 (2.14)
TW3862 ◊	9.66 (0.90)	41 7/8" (1064)	33 1/4" (843)	18.38 (1.71)	9.92 (0.92)	8 1/2" (203)	24.35 (2.26)
TW3872 ◊	11.70 (1.09)	41 7/8" (1064)	40 1/4" (1022)	21.64 (2.01)	11.73 (1.09)	10 1/4" (260)*	28.16 (2.26)
TW3876 ◊	12.29 (1.14)	41 7/8" (1064)	42 1/4" (1073)	22.72 (2.11)	12.32 (1.14)	6 1/4" (159)*	29.43 (2.73)

*Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096) except for 7'-5" and 7'-9" heights which are calculated using a header height of 8' (2438).

• Dimensions in parentheses are in millimeters or square meters.

◊ Meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m²; clear opening width of 20" (508) and clear opening height of 24" (610).

*Calculated based upon a structural header height of 8' (2438).

Opening calculations change when using PG Upgrade sill stop. For opening specifications for windows with Stormwatch® Protection, visit andersenwindows.com/openingspecs.

For cottage and reverse cottage sash opening specifications, visit andersenwindows.com/openingspecs.

TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

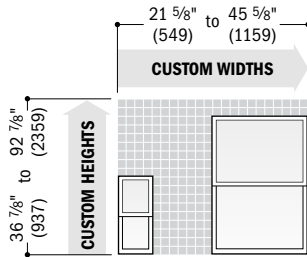
Custom Sizes and Specification Formulas



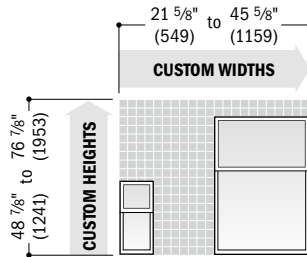
Available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply, contact your Andersen supplier. For minimum rough opening dimensions for joined windows, see specific joining instruction guides. Measurement guide for custom-size windows can be found at andersenwindows.com/measure.

Tilt-Wash Double-Hung Windows

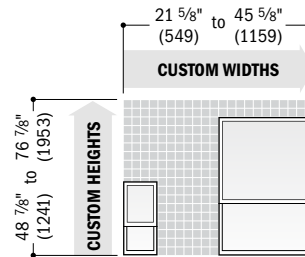
Equal



Cottage

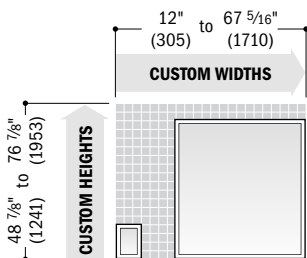


Reverse Cottage

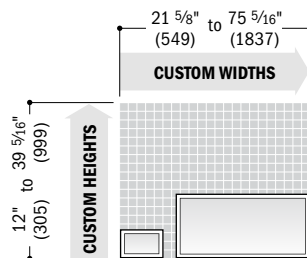


Clear Opening 	Width = window width - 1.852" (47) x 2 <i>Contact your Andersen supplier for clear opening height.</i>	Minimum R.O. 	Width = window width + 1/2" (51) Height = window height + 0"
Vent Opening 	<i>Vent opening formulas are dependent on window size, contact your Andersen supplier.</i>	Unobstr. Glass 	Width = window width - 3.376" (86) Height: Upper Sash = upper sash height - 3.035" (77) Lower Sash = lower sash height - 3.831" (97)

Tilt-Wash Picture Windows



Tilt-Wash Transom Windows



Minimum R.O. 	Width = window width + 1/2" (51) Height = window height + 0"	Unobstr. Glass 	Picture Window Width = window width - 4.924" (125) Height = window height - 7.531" (191)	Transom Window Width = window width - 6.625" (168) Height = window height - 6.625" (168)
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* Dimensions in parentheses are in millimeters.

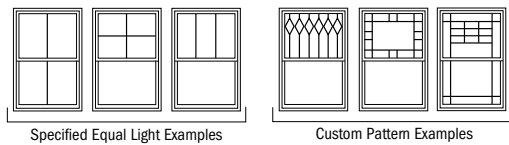
• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobstr. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

Grille Patterns

	Diamond*	Prairie A	6-Light Prairie	Colonial						
Tilt-Wash Double-Hung										
Tilt-Wash Picture										
Tilt-Wash Transom										

Patterns for double-hung windows are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung window patterns, identify the sash style (equal, cottage or reverse cottage) when ordering. **Number of lights and overall pattern varies with window size. Patterns are not available in all configurations.**

*Available only in Simulated Divided Light (SDL) configuration and only in 3/4" (19) and 7/8" (22) widths.

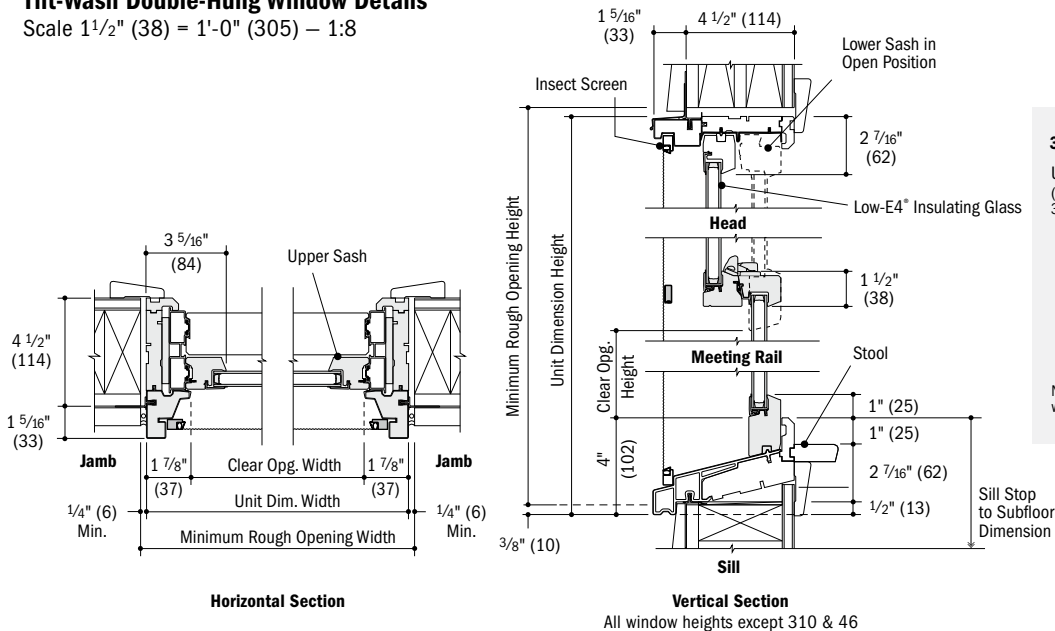


Specified equal light and custom patterns are also available. For more grille options, see page 13 or visit andersenwindows.com/grilles.

GRILLES TO BE UPPER SASH ONLY. PATTERN TO BE SUGGESTED BY HDC.

Tilt-Wash Double-Hung Window Details

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



310 & 46 Height Windows Only:

Upper Sash Meeting Rail (higher location on 310 and 46 heights)

Lower Sash in Open Position (opens higher to maintain clear opening)

Meeting Rail

Note: Location of support bar on optional insect screen aligns with meeting rail location on 310 and 46 window heights.

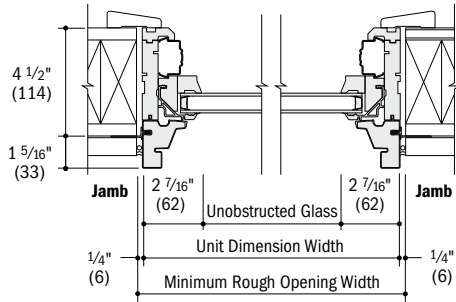
400 Series Tilt-Wash Double-Hung Full-Frame Windows

• Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
 • **Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.**
 • Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 • Dimensions in parentheses are in millimeters.

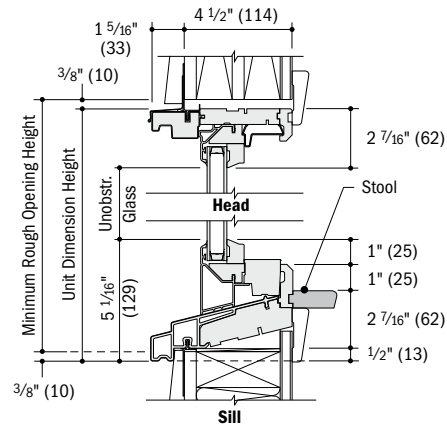
TILT-WASH DOUBLE-HUNG FULL-FRAME WINDOWS

Tilt-Wash Picture Window Details

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



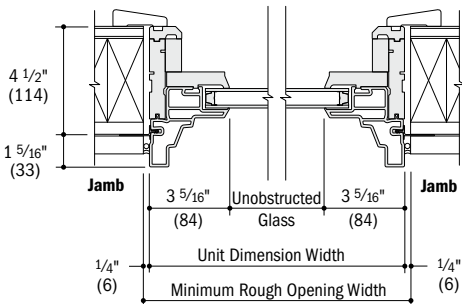
Horizontal Section



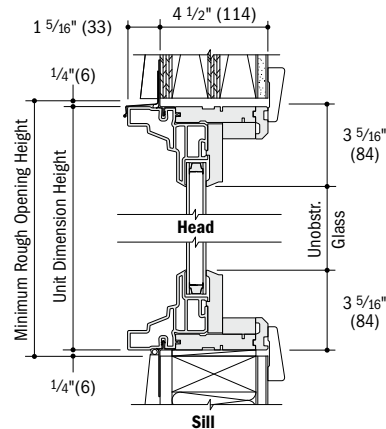
Vertical Section

Tilt-Wash Transom Window Details

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Horizontal Section



Vertical Section

Horizontal (stack) Joining Detail

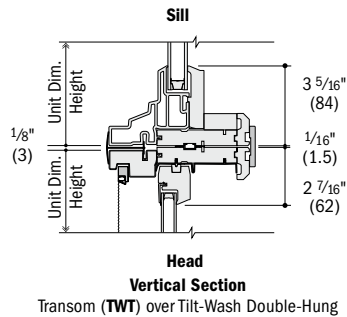
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Height

Sum of individual window heights
plus 1/16" (1.5) for each join.

Overall Rough Opening Height

Overall window dimension height.*



Vertical Section
Transom (TWT) over Tilt-Wash Double-Hung

Vertical (ribbon) Joining Detail

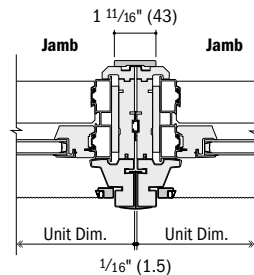
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

Overall Window Dimension Width

Sum of individual window widths
plus 1/16" (1.5) for each join.

Overall Rough Opening Width

Overall window dimension width plus 1/2" (13).

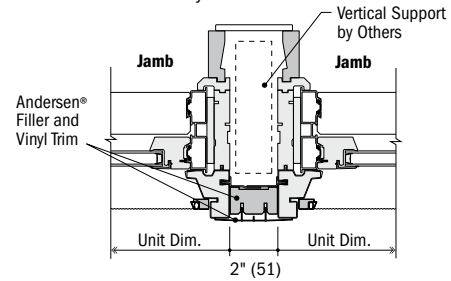


Horizontal Section
Tilt-Wash Double-Hung to Tilt-Wash Double-Hung

Separate Rough Openings Detail

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



Horizontal Section
Tilt-Wash Double-Hung and Tilt-Wash Double-Hung

- * Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- * Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 210-211.
- * Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- * Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.
- * Dimensions in parentheses are in millimeters.
- * For stacks where bottom unit in combination is a double-hung or picture window with a sloped sill. If bottom window has a straight sill add 1/2" (13) to the overall window dimension height.

For more joining information, see the combination designs section starting on page 181.

HISTORIC DISTRICT COMMISSION PROJECT REVIEW REQUEST

CITY OF DETROIT
PLANNING & DEVELOPMENT DEPARTMENT
2 WOODWARD AVENUE, ROOM 808, DETROIT, MI 48226

DATE: _____

PROPERTY INFORMATION

ADDRESS: _____ AKA: _____

HISTORIC DISTRICT: _____

SCOPE OF WORK: Windows/Doors Roof/Gutters/Chimney Porch/Deck Landscape/Fence/Tree/Park General Rehab
(Check ALL that apply) New Construction Demolition Addition Other: _____

APPLICANT IDENTIFICATION

Property Owner/Homeowner Contractor Tenant or Business Occupant Architect/Engineer/Consultant

NAME: _____ COMPANY NAME: _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ MOBILE: _____ EMAIL: _____

PROJECT REVIEW REQUEST CHECKLIST

Please attach the following documentation to your request:

PLEASE KEEP FILE SIZE OF ENTIRE SUBMISSION UNDER 30MB

- Completed Building Permit Application** (highlighted portions only)
- ePLANS Permit Number** (only applicable if you've already applied for permits through ePLANS)
- Photographs** of ALL sides of existing building or site
- Detailed photographs** of location of proposed work (photographs to show existing condition(s), design, color, & material)
- Description of existing conditions** (including materials and design)
- Description of project** (if replacing any existing material(s), include an explanation as to why replacement--rather than repair--of existing and/or construction of new is required)
- Detailed scope of work** (formatted as bulleted list)
- Brochure/cut sheets** for proposed replacement material(s) and/or product(s), as applicable

NOTE:

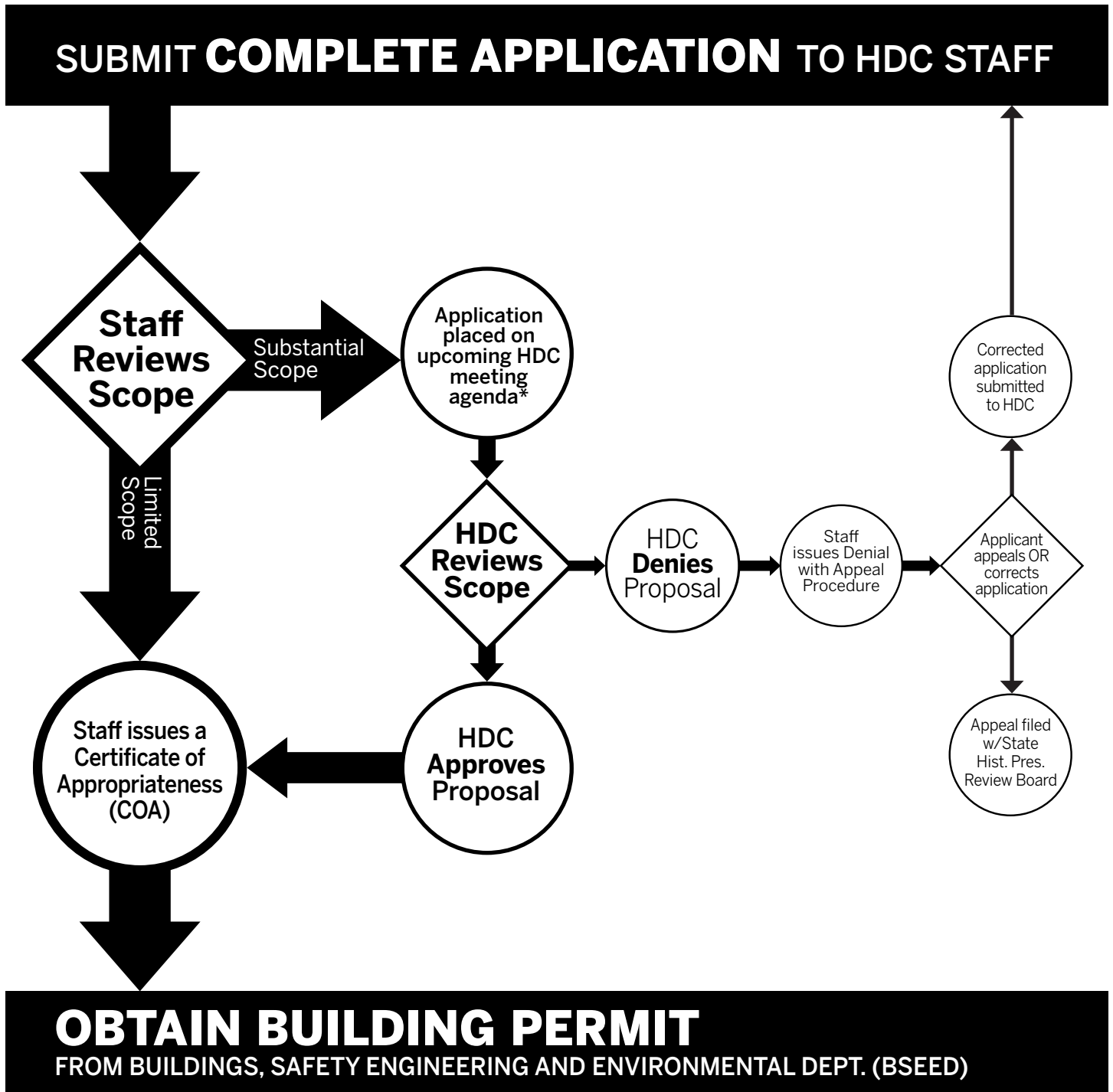
Based on the scope of work, additional documentation may be required.

See www.detroitmi.gov/hdc for scope-specific requirements.

Upon receipt of this documentation, staff will review and inform you of the next steps toward obtaining your building permit from the Buildings, Safety Engineering and Environmental Department (BSEED) to perform the work.

SUBMIT COMPLETED REQUESTS TO HDC@DETROITMI.GOV

HISTORIC DISTRICT COMMISSION REVIEW & PERMIT PROCESS



OBTAIN BUILDING PERMIT

FROM BUILDINGS, SAFETY ENGINEERING AND ENVIRONMENTAL DEPT. (BSEED)

* THE COMMISSION MEETS REGULARLY AT LEAST ONCE PER MONTH, TYPICALLY ON THE SECOND WEDNESDAY OF THE MONTH. (SEE WEBSITE FOR MEETING SCHEDULE/AGENDAS)

FIND OUT MORE AT www.detroitmi.gov/hdc