

NO.	DATE	REVISION DESCRIPTION
1	01/17/2022	REVISED PERMITS AND NUMBERING FIRE DEPARTMENT COMMENTS
2	04/13/2022	REVISED FOR WANS GRADING REVISIONS



REDWOOD  
**MIAMISBURG**  
CITY OF MIAMISBURG, MONTGOMERY COUNTY, OHIO

**GRADING & DRAINAGE PLAN**

ISSUE SUBMITTAL DATE:	10/29/2021
JOB NO.:	757730
DESIGN:	TPL
DRAWN:	JWH
CHECKED:	BAP
SHEET NO.:	C4.0



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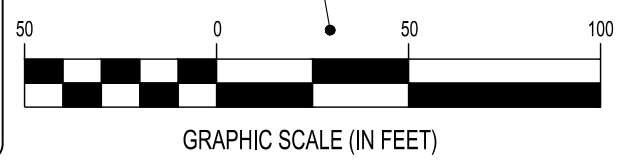
**LEGEND**

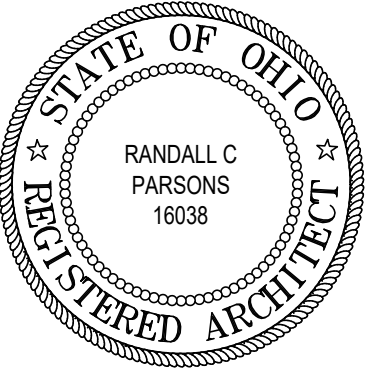
- SEE SHEET C1.5-C1.6 FOR EXISTING FEATURES
- PROPOSED MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - LIMITS OF DISTURBANCE
  - FINISH FLOOR ELEVATION
  - GARAGE FLOOR ELEVATION
  - HIGH POINT
  - FOUNDATION BREAK
  - PROPOSED SWALE
  - PROPOSED STORM SEWER
  - PROPOSED STORM MANHOLE/INLET
  - PROPOSED STORM CURB INLET
  - PROPOSED STORM OUTLET
  - FLOW ARROW
  - STORM SEWER STRUCTURE NUMBER

**GENERAL NOTES:**

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF MIAMISBURG, MONTGOMERY COUNTY, ODOT, AND O.S.H.A. STANDARDS. THE CONTRACTOR SHALL OBTAIN FINAL PERMITTING AND APPROVAL INSPECTIONS AS REQUIRED FROM THE LOCALITY.
- STORM SEWER STRUCTURES SHALL CONFORM TO ODOT AND CITY OF MIAMISBURG STANDARD CONSTRUCTION DRAWINGS.
- ALL ELECTRICAL, TELECOMMUNICATION, AND GAS TO BE DESIGNED BY OTHERS.
- REFER TO GEOTECHNICAL REPORT FOR SITE PREPARATION RECOMMENDATIONS.
- PROVIDE SPIDER DRAINS ON ALL PROPOSED INLET BASINS IN PAVEMENT.
- PROVIDE UNDERDRAINS ALONG CENTER LINE OF THE PROPOSED INVERTED CROWN ROADS. SEE TYPICAL ROADWAY SECTION.

	<b>BENCHMARK</b>	DATUM:	NAVD 88
BM "A":	EAST ARROW BOLT ON HYDRANT 862.06		
BM "B":	EAST ARROW BOLT ON HYDRANT 867.04		
*REFER TO COVER SHEET FOR COMPLETE BENCHMARK INFORMATION			





REVISIONS

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3660 Embassy Parkway  
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**MPG**  
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OVERALL FOUNDATION BLDGS.: Q, R

PROJECT #: 33521 DATE: JULY 27, 2022

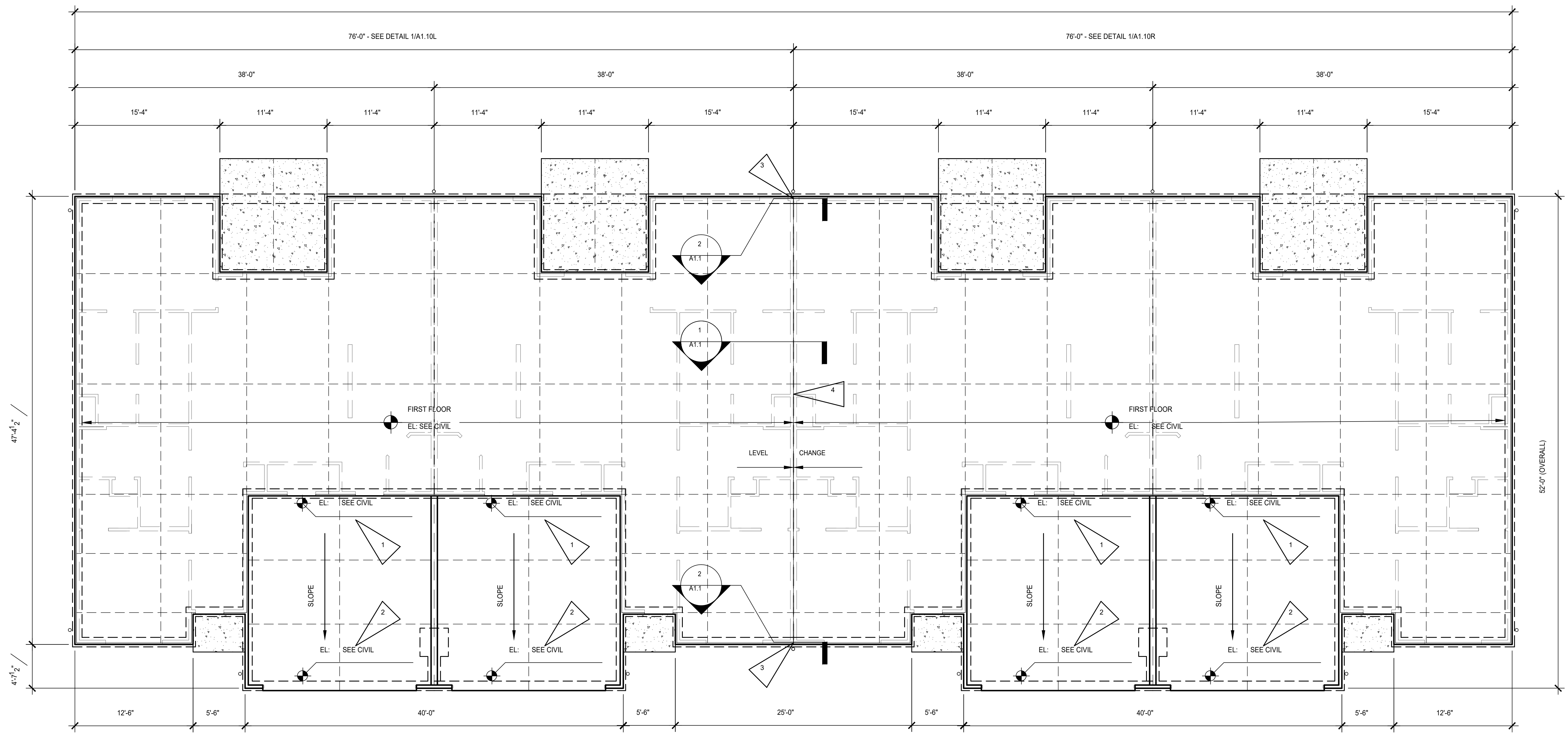
REDWOOD MIAMISBURG

MIAMISBURG OH, 45449



**A1.32**  
25 OF 137

8' BREAK  
152'-0" (OVERALL)



OVERALL FOUNDATION PLAN

SCALE : 3/32" = 1'-0"

BUILDING: R

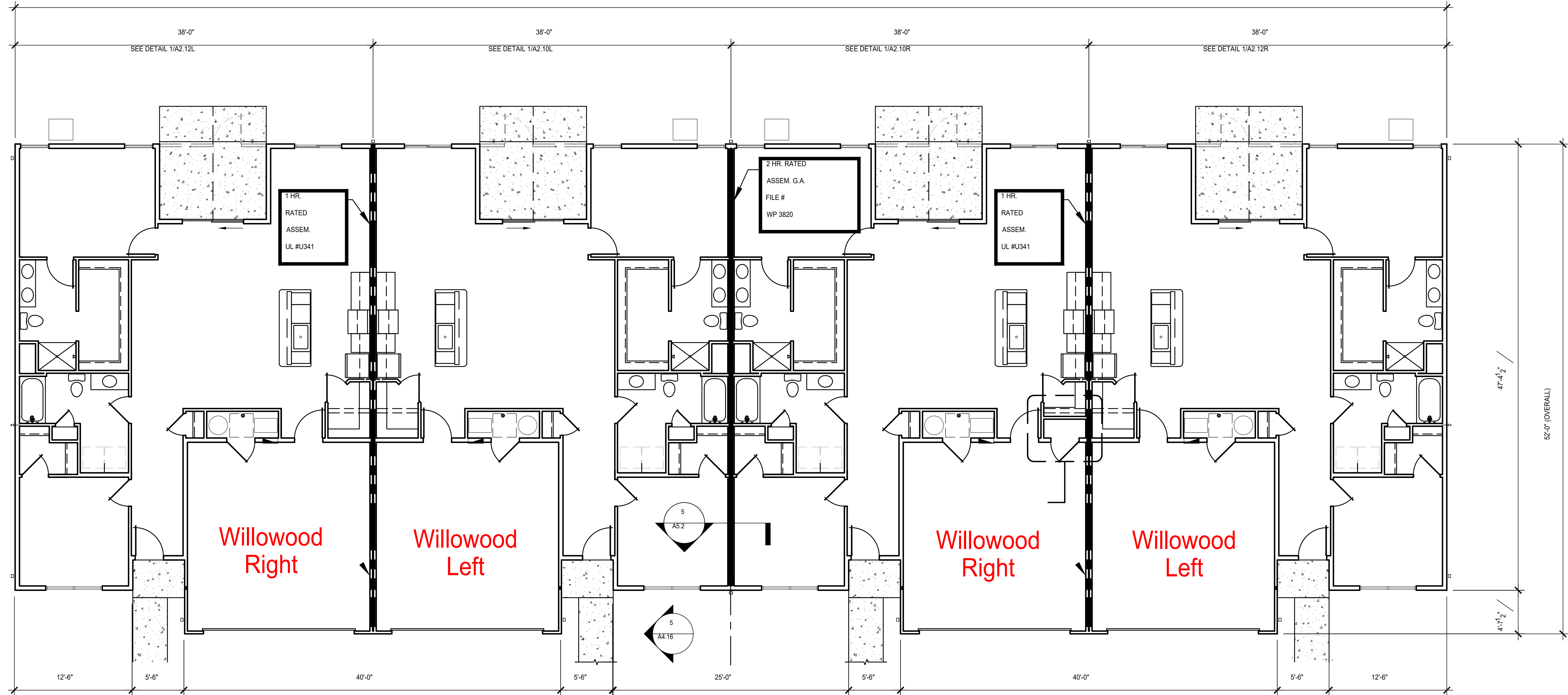
# BUILDING R

2 - Willowood Left

2 - Willowood Right

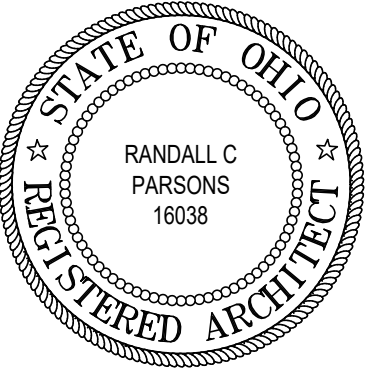
8" BREAK

152'-0" (OVERALL)



6" SEWER TAP ●

● 1.5" WATER TAP



REVISIONS

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OVERALL FLOOR PLANS - BLDGS.; Q, R

PROJECT #: 33521 DATE: JULY 27, 2022

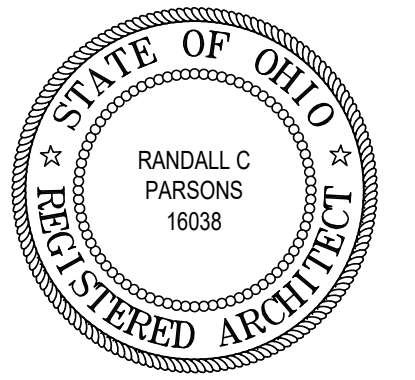
REDWOOD MIAMISBURG

MIAMISBURG OH, 45449



**A2.30**

61 OF 137



REVISIONS

7/20/22 PLAN REVIEW & OWNER CHANGE

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WILLOWOOD END LEFT PLAN  
PROJECT #: 31121  
DATE: APRIL 8, 2022

REDWOOD THE HARRISON PHASE IV  
RED BUCKEYE DRIVE  
HUBER HEIGHTS, OHIO 45371



SYMBOLS LEGEND

- W INDICATES WALL CONSTRUCTION TYPE, REFER TO THIS SHEET FOR DETAILED ASSEMBLY DESCRIPTIONS
- ROOM NAME INDICATES ROOM NAME REFER TO SHEET A6.7 FOR ROOM FINISH MATERIALS
- TYPICAL SECTION AND DETAIL FLAGS:
  - REFERS TO SECTION OR ELEVATION NUMBER
  - REFERS TO DRAWING SHEET NUMBER
- A INDICATES WINDOW TYPES- REFER TO SHEET A6.7 FOR WINDOW SCHEDULE
- 2/10 INDICATES DOOR SIZE- REFER TO SHEET A6.7 FOR DOOR AND FRAME MATERIALS AND ELEVATIONS
- INDICATES RATED SEPARATION WALL, 2 HOUR, G.A. FILE NO. WP-3820. RUN TIGHT TO UNDERSIDE OF ROOF SHEATHING.
- INDICATES SLIDING PATIO DOOR ACTIVE PANEL AND DIRECTION ACTIVE PANEL IS TO SLIDE.
- HP HIGH PROFILE END. SEE EXTERIOR ELEVATIONS.
- STD STANDARD PROFILE END. SEE EXTERIOR ELEVATIONS.

FLAG NOTES:

- PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED FOR GRAB BAR MOUNTING. SEE INTERIOR ELEVATIONS SHEET A6.2 FOR MORE INFORMATION.
- 30"x30" CLEAR FLOOR SPACE FOR MAINTENANCE OF APPLIANCES.
- SAW CUT - SEE FOUNDATION SHEETS.
- BUILD WALLS TIGHT TO UNDERSIDE OF TRUSS BOTTOM CHORD. PROVIDE 2x4 CEILING JOISTS AT 8'-1" A.F.F. WITH 5/8" GYP. BD.
- ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- PROVIDE (1) 12" WIRE SHELF WITH INTEGRAL COAT ROD. MOUNT ROD AT +54" A.F.F.
- REINFORCED CONCRETE ADA ACCESSIBLE WALK (1:20 SLOPE MAXIMUM). REFER TO CIVIL DRAWINGS FOR GRADES. RISE NOT TO EXCEED 6".
- PROVIDE PLUMBING ACCESS PANEL.
- 4" REINFORCED CONCRETE SLAB WITH FIBER MESH OVER 2" COMPACTED GRAVEL. SLOPE AWAY FROM UNIT.
- FRAME DOWN AT VAULTED TRUSS TO MATCH BOTTOM CHORD OF STD TRUSS.
- PROVIDE (4) WIRE SHELVES WITH SUPPORT BRACKETS.
- NOT USED
- VINYL CLAD INSULATED WINDOWS ARE MANUFACTURED BY SIMONTON STANDARD WINDOW SIZE MEETS OR EXCEEDS FIRST FLOOR OBC EGRESS REQUIREMENTS AT BEDROOM. WRAP (3) SIDES OF WINDOW OPENING WITH GYP. BD. INSTALL 1x TRIM WITH CASING ON SILL.
- PROVIDE (1) 12" WIRE SHELF WITH LATERAL COAT ROD. MOUNT ROD AT +54" A.F.F. ON SIDE WALLS AND (2) WIRE SHELVES/COAT RODS ON REAR WALL.
- PROVIDE 3-2x4 POST TOP OF FOUNDATION ASSEMBLY TO UNDERSIDE OF ROOF GIRDER TRUSS BEARING LOCATION. SEE DETAIL 10A1.0 FOR MORE INFORMATION.
- DOWNSPOUT - REFER TO FOUNDATION AND CIVIL DRAWINGS.
- FROST FREE HOSE BIBB.
- WASHER AND DRYER. PROVIDE PLUMBING CONNECTION BOX FOR WASHING MACHINE AND DRYER VENT THROUGH ATTIC SPACE. SEE PLUMBING AND MECHANICAL DRAWINGS FOR MORE INFORMATION.
- WASHER TO BE INSTALLED ON LEFT SIDE OF OPENING. DRYER TO BE INSTALLED ON RIGHT SIDE.
- ICE MAKER WATER SOURCE.
- 1'-0" STONE RETURN.
- BALLOON FRAME WALL. CONTINUOUS FLOOR TO UNDERSIDE OF GABLE END VAULTED TRUSS BOTTOM CHORD.
- EXTEND WALL TO UNDERSIDE OF ROOF TRUSS BOTTOM CHORD.
- CAP "PLANT SHELF" AREA WITH (1) LAYER OF 7/16" O.S.B.

GENERAL FLOOR PLAN NOTES:

- ALL PARTITION DIMENSIONS ARE FROM THE FACE OF STUD TO FACE OF STUD, AND/OR FACE OF MASONRY, UNLESS NOTED OTHERWISE.
  - VERIFY ALL DIMENSIONED CONDITIONS IN THE FIELD. WHEN DIMENSIONS AND/OR CONDITIONS AS INDICATED ON THE DRAWINGS CONFLICT WITH ACTUAL, CONTACT THE ARCHITECT FOR CLARIFICATION.
  - WALL THICKNESS INDICATED ON FLOOR PLAN(S) SHALL BE CONSTANT FOR THE ENTIRE LENGTH OF WALL (U.O.)
  - PROVIDE BEHIND WALL REINFORCING AND BLOCKING AS REQUIRED BEHIND DOOR STOPS, ATTACHMENT OF MILLWORK, CASEWORK, TOILET ACCESSORIES, ETC. SEE SHEET A6.2 FOR MORE INFORMATION.
  - ALL EXTERIOR CORNERS THROUGHOUT SPACE TO HAVE METAL CORNER BEADS.
- NOTES:
- ALL SINGLE STORY UNITS MUST MEET FAIR HOUSING ACT ACCESSIBILITY GUIDELINES FOR ADAPTABILITY.
  - THESE ARE TYPE 'B' DWELLING UNITS AS PER ICC A117.1-2009, SECTION 1004.

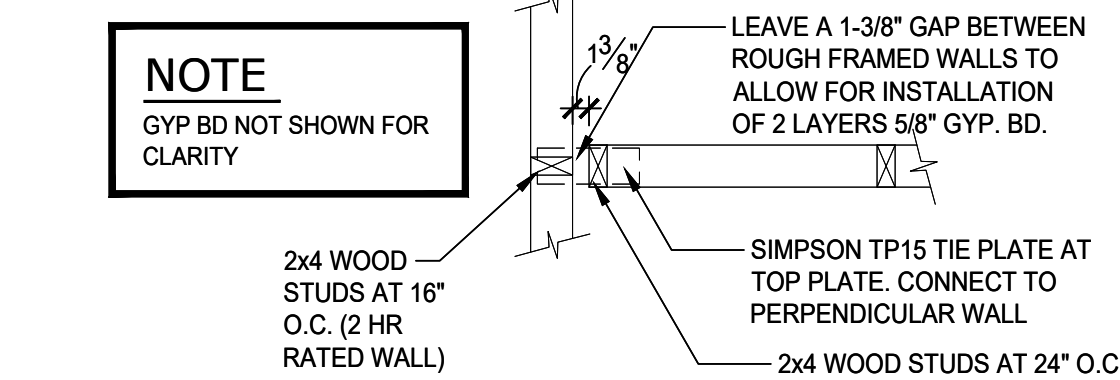
- \* VERIFY ROUGH OPENING WITH DOOR, WINDOW OR FIXTURE MANUFACTURER PRIOR TO WOOD FRAMING.
- \*\* WALL SECTION NOTE :  
REFER TO EXTERIOR ELEVATIONS FOR EXTERIOR FINISHES.

WALL TYPE LEGEND (CONT'D)

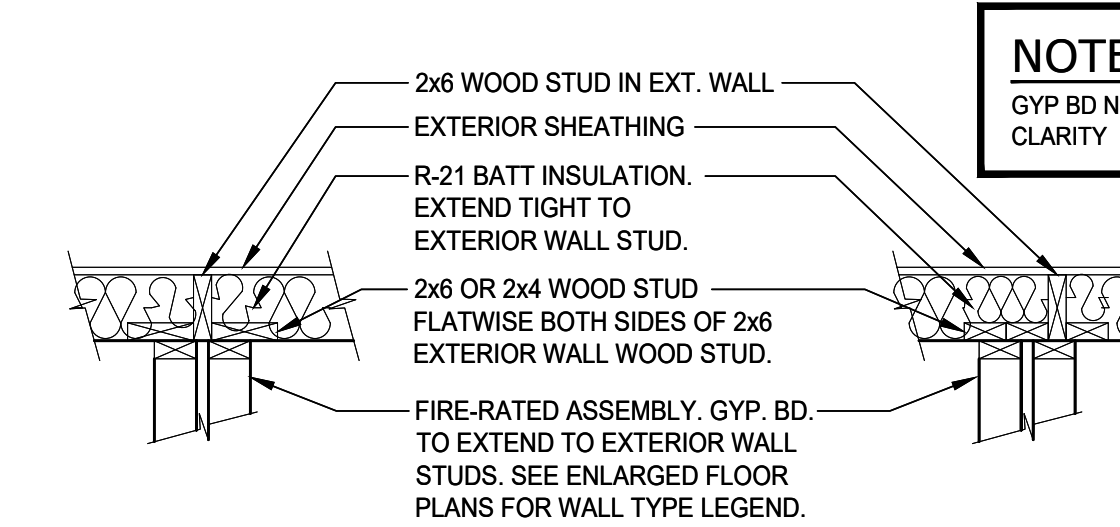
- E NOT USED.
- F NOT USED.
- G GARAGE / UNIT SEPARATION WALL - 2x6 AT 24" O.C. 2x6 WOOD STUDS AT 24" O.C. WITH 5/8" TYPE 'X' GYP. BD. EACH SIDE WITH R-21 KRAFT-FACED BATT INSULATION. BUILD WALL TIGHT TO TRUSS BOTTOM CHORD. SEE 3/A5.2
- H TWO-HOUR RATED SEPARATION WALL - 2x4 AT 16" O.C. (2) LAYERS 5/8" TYPE 'X' GYP. BD. ONE SIDE OF 2x4 WOOD STUDS AT 16" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION AND (2) LAYERS 5/8" TYPE 'X' GYP. BD. ONE SIDE. BUILD WALL TIGHT TO UNDERSIDE OF ROOF SHEATHING. (G.A. FILE # WP3820) SEE 4/A5.1 AND SHEET A5.0
- D1 BALLOON FRAME (WHERE NOTE 22 OCCURS) EXTERIOR WALL CONSTRUCTION - 2x6 AT 24" O.C. UPPER WALL HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 24" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR. LOWER WALL STONE VENEER OVER 1/16" PROSOCO R-GUARD SYSTEM (OR APPROVED EQUAL) OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 24" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR. REFER TO ELEVATIONS FOR STONE LOCATIONS
- D2 BALLOON FRAME (WHERE NOTE 22 OCCURS) EXTERIOR WALL CONSTRUCTION - 2x6 AT 16" O.C. UPPER WALL HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 16" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR. LOWER WALL STONE VENEER OVER 1/16" PROSOCO R-GUARD SYSTEM (OR APPROVED EQUAL) OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 16" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR. REFER TO ELEVATIONS FOR STONE LOCATIONS
- D3 BALLOON FRAME (WHERE NOTE 22 OCCURS) EXTERIOR WALL CONSTRUCTION - 2x6 AT 24" O.C. HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 24" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR.
- D4 EXTERIOR WALL CONSTRUCTION - 2x4 AT 24" O.C. HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x4 WOOD STUDS AT 24" O.C. WITH 5/8" GYP. BD. INTERIOR.
- D5 EXTERIOR WALL CONSTRUCTION - 2x6 AT 16" O.C. HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 16" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR.

2 NOT USED  
SCALE: 3/4" = 1'-0"

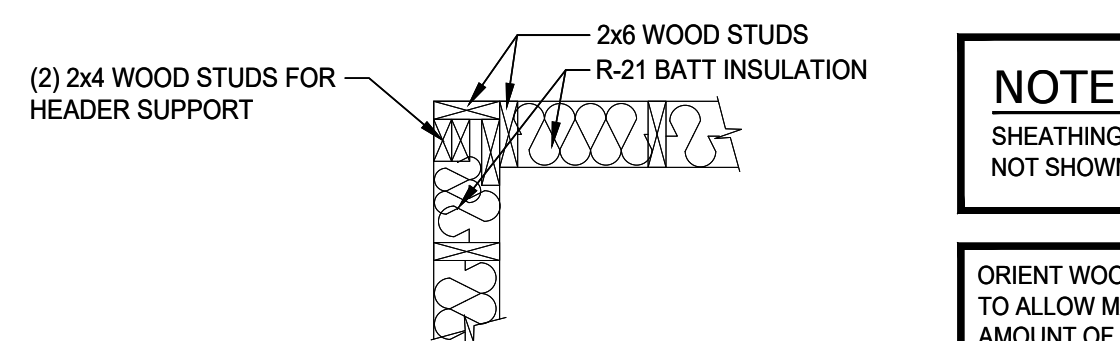
3 NOT USED  
SCALE: 3/4" = 1'-0"



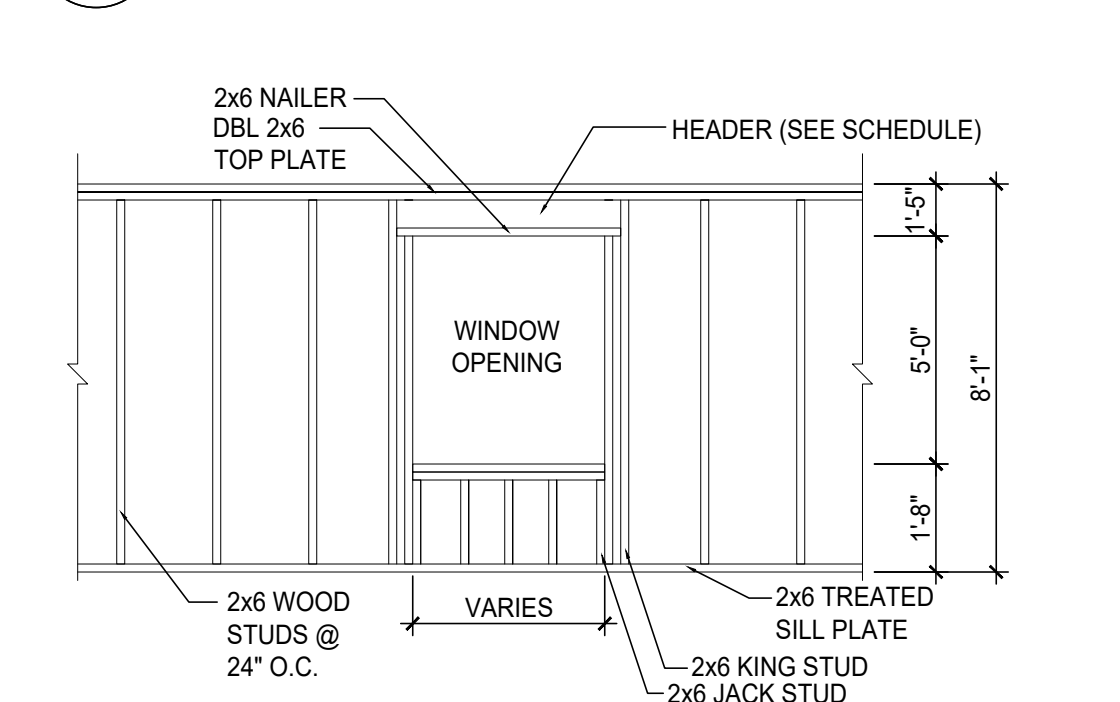
4 TYP. FRAMING - 2 HR WALL  
SCALE: 3/4" = 1'-0"



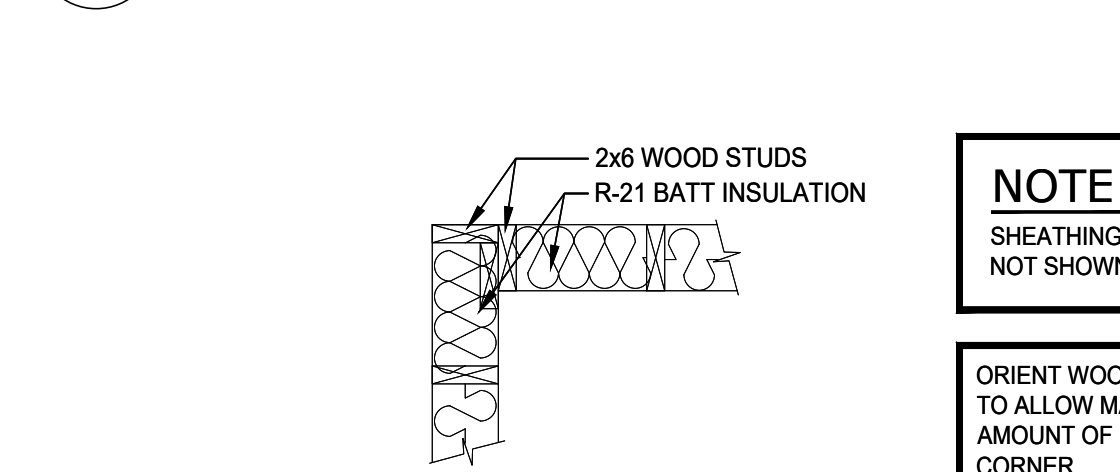
5 FRAMING - EXTERIOR WALL  
SCALE: 3/4" = 1'-0" (CENTERED & OFFSET)



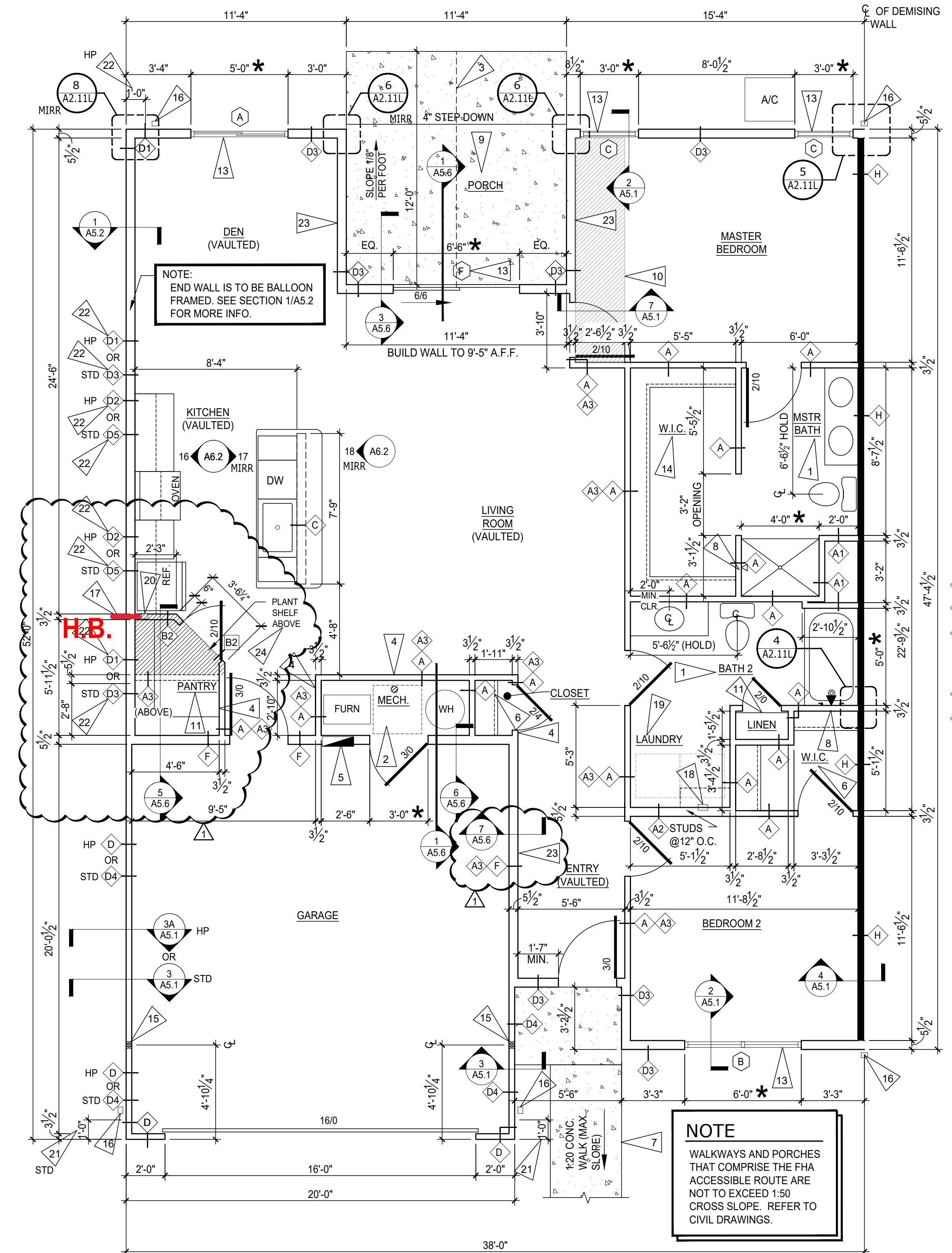
6 FRAMING - CALIFORNIA CORNER  
SCALE: 3/4" = 1'-0"



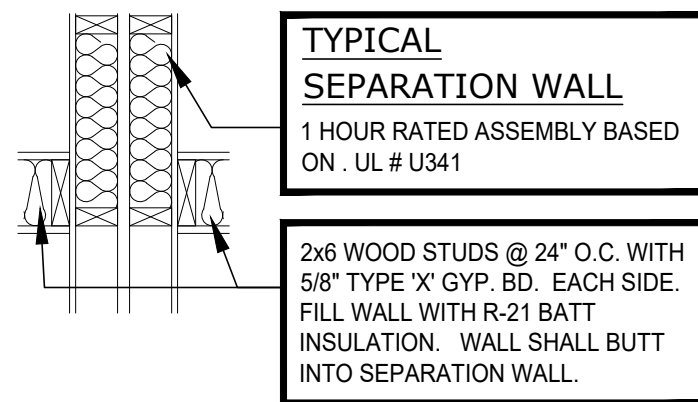
7 DETAIL TYP. WALL FRAME DETAIL  
SCALE: 1/4" = 1'-0"



8 FRAMING - TYP. OUTSIDE CORNER CALIFORNIA CORNER  
SCALE: 3/4" = 1'-0"



1 WILLOWOOD END - LEFT PLAN  
SCALE: 1/4" = 1'-0"

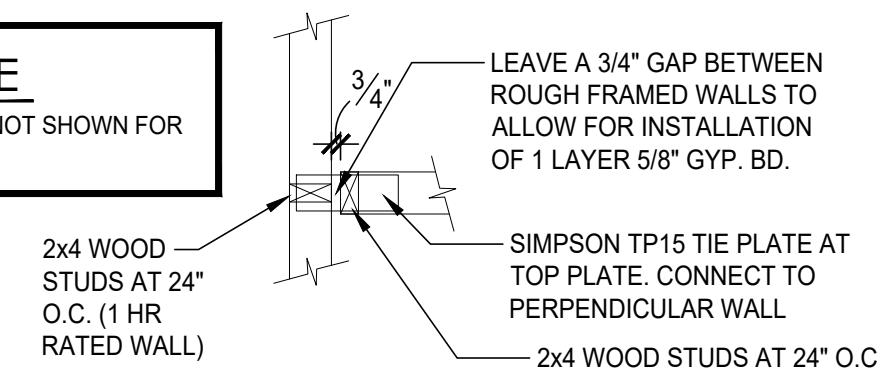


**TYPICAL SEPARATION WALL**  
1 HOUR RATED ASSEMBLY BASED ON - UL # U341

2x6 WOOD STUDS @ 24" O.C. WITH 5/8" TYPE 'X' GYP. BD. EACH SIDE. FILL WALL WITH R-21 BATT INSULATION. WALL SHALL BUTT INTO SEPARATION WALL.

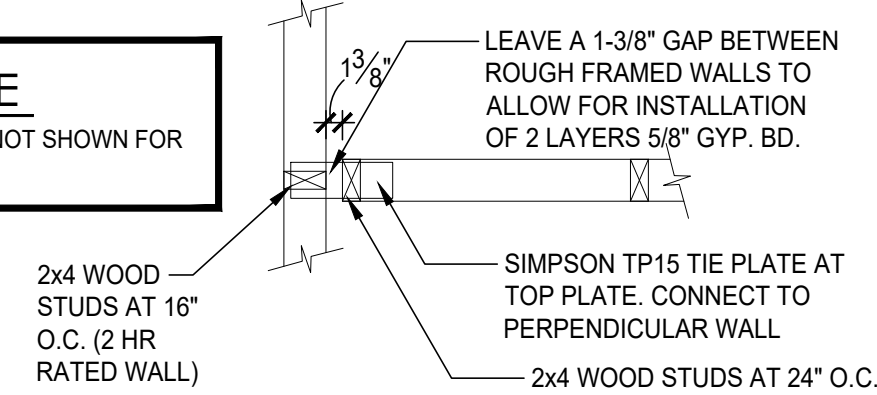
**2 TYP. SEPERATION WALL**  
SCALE: 3/4" = 1'-0"

**NOTE**



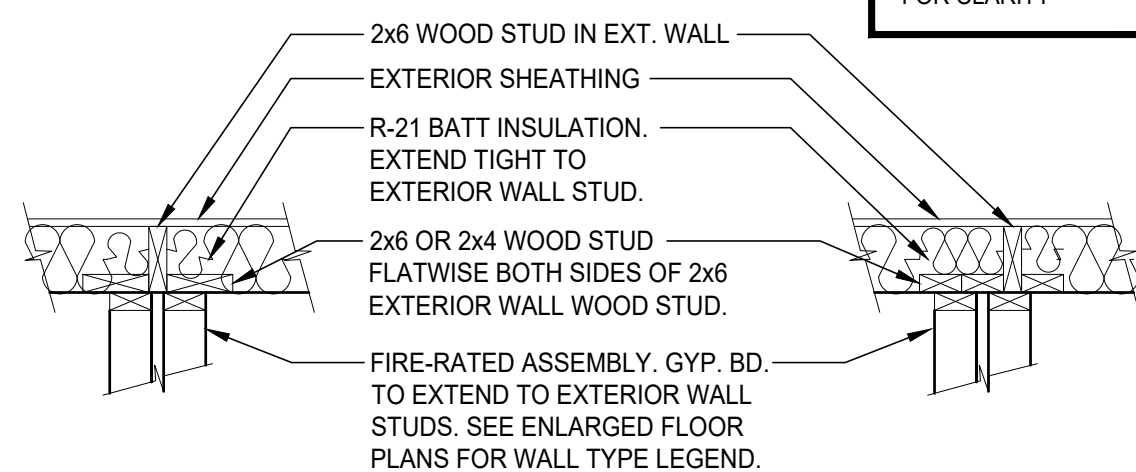
**3 TYP. FRAMING - 1 HR WALL**  
SCALE: 3/4" = 1'-0"

**NOTE**

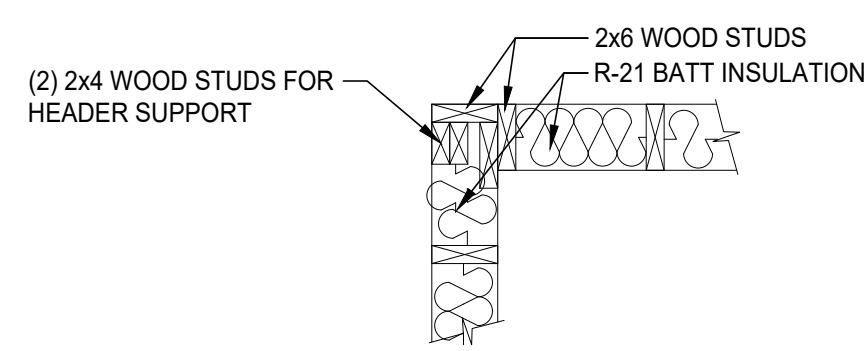


**4 TYP. FRAMING - 2 HR WALL**  
SCALE: 3/4" = 1'-0"

**NOTE**



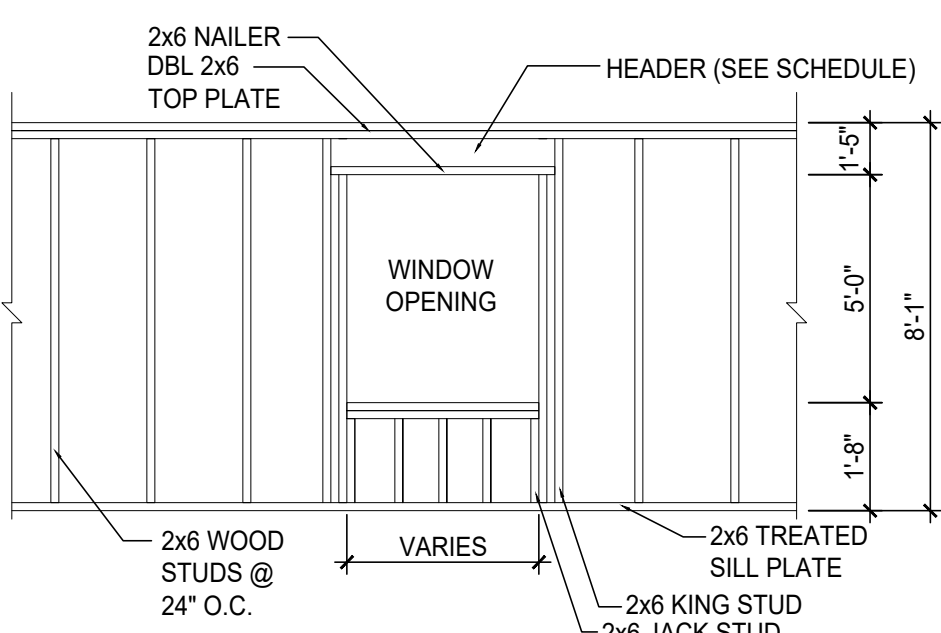
**5 FRAMING - EXT. WALL (CENTERED & OFFSET)**  
SCALE: 3/4" = 1'-0"



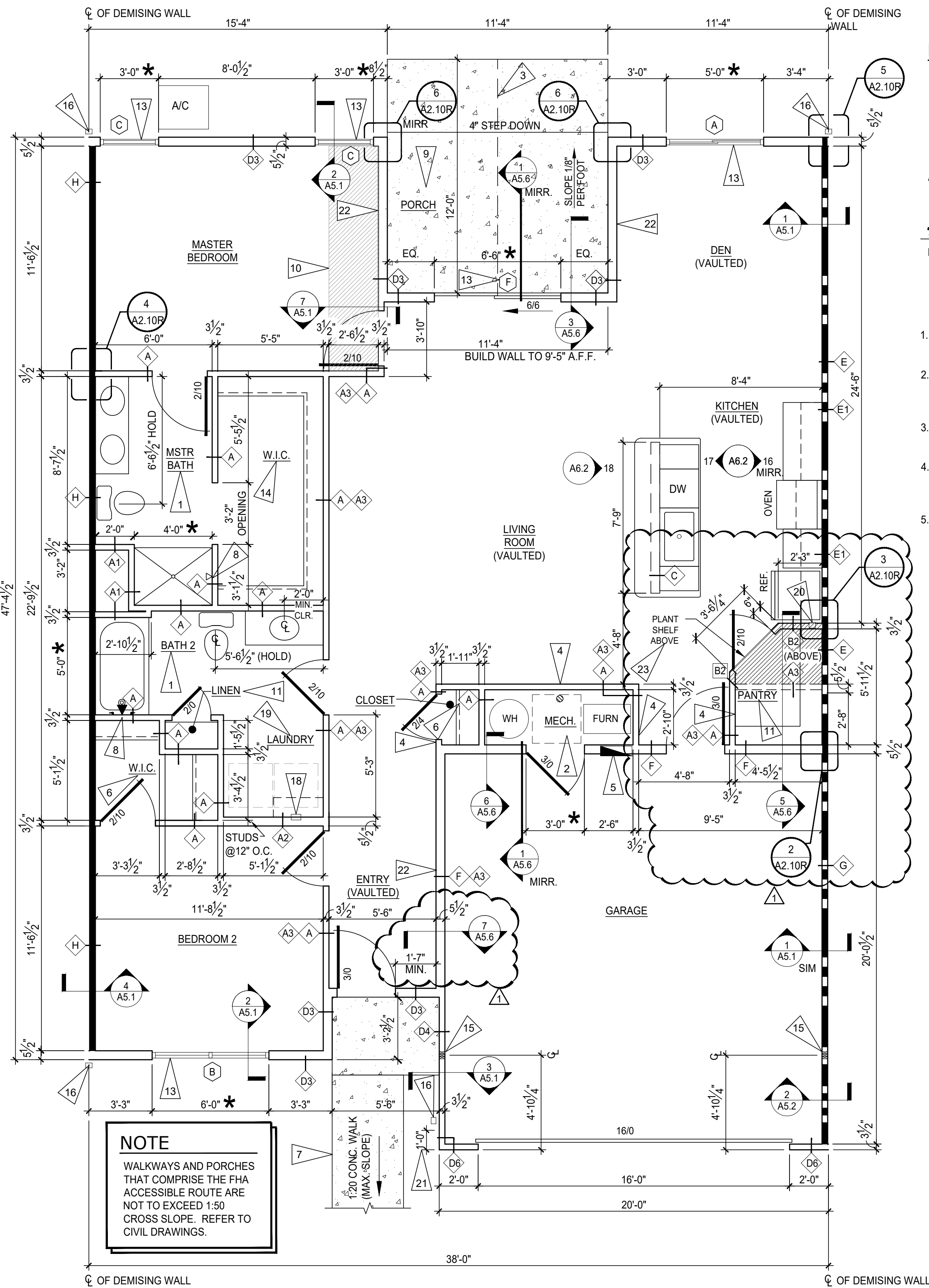
ORIENT WOOD STUDS SO AS TO ALLOW MAXIMUM AMOUNT OF INSULATION IN CORNER.

**NOTE**  
SHEATHING AND GYP. BD. NOT SHOWN FOR CLARITY

**6 HEADER SUPPORT**  
SCALE: 3/4" = 1'-0"



**7 DETAIL TYP. WALL FRAME DETAIL**  
SCALE: 1/4" = 1'-0"



**1 WILLOWOOD MID - RIGHT PLAN**  
SCALE: 1/4" = 1'-0"

**SYMBOLS LEGEND**

- INDICATES WALL CONSTRUCTION TYPE, REFER TO THIS SHEET FOR DETAILED ASSEMBLY DESCRIPTIONS
- INDICATES ROOM NAME REFER TO SHEET A6.7 FOR ROOM FINISH MATERIALS
- TYPICAL SECTION AND DETAIL FLAGS:  
REFERS TO SECTION OR ELEVATION NUMBER  
REFERS TO DRAWING SHEET NUMBER
- INDICATES WINDOW TYPES- REFER TO SHEET A6.7 FOR WINDOW SCHEDULE
- INDICATES DOOR SIZE- REFER TO SHEET A6.7 FOR DOOR AND FRAME MATERIALS AND ELEVATIONS
- INDICATES RATED SEPARATION WALL, 1 HOUR: UL RATING #U-341 OR G.A. FILE # WP3370. RUN TIGHT TO UNDERSIDE OF ROOF SHEATHING
- INDICATES RATED SEPARATION WALL, 2 HOUR: G.A. FILE NO. WP-3820. RUN TIGHT TO UNDERSIDE OF ROOF SHEATHING.
- INDICATES SLIDING PATIO DOOR ACTIVE PANEL AND DIRECTION ACTIVE PANEL IS TO SLIDE.

**NOTES:**

1. ALL SINGLE STORY UNITS MUST MEET FAIR HOUSING ACT ACCESSIBILITY GUIDELINES FOR ADAPTABILITY.
2. THESE ARE TYPE 'B' DWELLING UNITS AS PER ICC A117.1-2009, SECTION 1004.
- \* VERIFY ROUGH OPENING WITH DOOR, WINDOW OR FIXTURE MANUFACTURER PRIOR TO WOOD FRAMING.
- \*\* WALL SECTION NOTE:  
REFER TO EXTERIOR ELEVATION SHEETS FOR EXTERIOR FINISHES.

**GENERAL FLOOR PLAN NOTES:**

1. ALL PARTITION DIMENSIONS ARE FROM THE FACE OF STUD TO FACE OF STUD, AND/OR FACE OF MASONRY, UNLESS NOTED OTHERWISE.
2. VERIFY ALL DIMENSIONED CONDITIONS IN THE FIELD. WHEN DIMENSIONS AND/OR CONDITIONS AS INDICATED ON THE DRAWINGS CONFLICT WITH ACTUAL, CONTACT THE ARCHITECT FOR CLARIFICATION.
3. WALL THICKNESS INDICATED ON FLOOR PLAN(S) SHALL BE CONSTANT FOR THE ENTIRE LENGTH OF WALL (U.N.O.)
4. PROVIDE BEHIND WALL REINFORCING AND BLOCKING AS REQUIRED BEHIND DOOR STOPS. ATTACHMENT OF MILLWORK, CASEWORK, TOILET ACCESSORIES, ETC. SEE SHEET A6.2 FOR MORE INFORMATION.
5. ALL EXTERIOR CORNERS THROUGHOUT SPACE TO HAVE METAL CORNER BEADS.

**FLAG NOTES:**

1. PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED FOR GRAB BAR MOUNTING. SEE INTERIOR ELEVATIONS SHEET A6.2 FOR MORE INFORMATION.
2. 30"x30" CLEAR FLOOR SPACE FOR MAINTENANCE OF APPLIANCES.
3. SAW CUT - SEE FOUNDATION SHEETS.
4. BUILD WALLS TIGHT TO UNDERSIDE OF TRUSS BOTTOM CHORD. PROVIDE 2x4 CEILING JOISTS AT 8'-1" A.F.F. WITH 5/8" GYP. BD.
5. ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
6. PROVIDE (1) 12" WIRE SHELF WITH INTEGRAL COAT ROD. MOUNT ROD AT +54" A.F.F.
7. REINFORCED CONCRETE ADA ACCESSIBLE WALK (1:20 SLOPE MAXIMUM). REFER TO CIVIL DRAWINGS FOR GRADES. RISE NOT TO EXCEED 6".
8. PROVIDE PLUMBING ACCESS PANEL.
9. 4" REINFORCED CONCRETE SLAB WITH FIBER MESH OVER 2" COMPACTED GRAVEL. SLOPE AWAY FROM UNIT.
10. FRAME DOWN AT VAULTED TRUSS TO MATCH BOTTOM CHORD OF STD TRUSS.
11. PROVIDE (4) WIRE SHELVES WITH SUPPORT BRACKETS.
12. NOT USED
13. VINYL CLAD INSULATED WINDOWS ARE MANUFACTURED BY SIMONTON. STANDARD WINDOW SIZE MEETS OR EXCEEDS FIRST FLOOR OBC EGRESS REQUIREMENTS AT BEDROOM. WRAP (3) SIDES OF WINDOW OPENING WITH GYP. BD. INSTALL 1x TRIM WITH CASING ON SILL.
14. PROVIDE (1) 12" WIRE SHELF WITH LATERAL COAT ROD. MOUNT ROD AT +54" A.F.F. ON SIDE WALLS AND (2) WIRE SHELVES/COAT RODS ON REAR WALL.
15. PROVIDE 3-2x4 POST TOP OF FOUNDATION ASSEMBLY TO UNDERSIDE OF ROOF GIRDER TRUSS BEARING LOCATION. SEE DETAIL 10A.1.0 FOR MORE INFORMATION.
16. DOWNSPOUT - REFER TO FOUNDATION AND CIVIL DRAWINGS.
17. NOT USED.
18. WASHER AND DRYER. PROVIDE PLUMBING CONNECTION BOX FOR WASHING MACHINE AND DRYER VENT THROUGH ATTIC SPACE. SEE PLUMBING AND MECHANICAL DRAWINGS FOR MORE INFORMATION.
19. WASHER TO BE INSTALLED ON LEFT SIDE OF OPENING. DRYER TO BE INSTALLED ON RIGHT SIDE.
20. ICE MAKER WATER SOURCE.
21. 1'-0" STONE RETURN.
22. EXTEND WALL TO UNDERSIDE OF ROOF TRUSS BOTTOM CHORD.
23. CAP "PLANT SHELF" AREA WITH (1) LAYER OF 7/16 O.S.B.

**WALL TYPE LEGEND**

- 1/2" GYP. BD. EACH SIDE OF 2x4 WOOD STUDS AT 24" O.C. BUILD WALL TIGHT TO BOTTOM CHORD OF TRUSSES. USE MOISTURE RESISTANT GYP. BD. AT WET/RESTROOM SIDE OF WALL.
- 1/2" GYP. BD. ON ONE SIDE OF 2x4 WOOD STUDS AT 24" O.C. BUILD WALL TIGHT TO BOTTOM CHORD OF TRUSSES. USE MOISTURE RESISTANT GYP. BD. AT WET/RESTROOM SIDE OF WALL.
- 1/2" GYP. BD. EACH SIDE OF 2x6 WOOD STUDS AT 12" O.C. BUILD WALL TIGHT TO BOTTOM CHORD OF TRUSSES. USE MOISTURE RESISTANT GYP. BD. AT WET/RESTROOM SIDE OF WALL.
- 1/2" GYP. BD. ON ONE SIDE OF 2x6 WOOD STUDS AT 24" O.C. WITH R-21 KRAFT FACED BATT INSULATION. BUILD WALL ABOVE WALL TYPE 'A'.
- NOT USED.
- NOT USED.
- 1/2" GYP. BD. EACH SIDE OF 2x4 WOOD STUDS AT 24" O.C. BUILD WALL TO 8'-1" A.F.F. CAP WITH 7/16" O.S.B.
- LOW WALL: 1/2" GYP. BD. EACH SIDE OF 2x6 WOOD STUDS AT 24" O.C. BUILD WALL TO UNDERSIDE OF COUNTERTOP, +34 1/2" A.F.F.
- EXTERIOR WALL CONSTRUCTION - 2x4 AT 24" O.C. UPPER WALL: HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x4 WOOD STUDS AT 24" O.C. WITH 5/8" GYP. BD. INTERIOR. LOWER WALL: STONE VENEER OVER 1/16" PROSOCO R-GUARD SYSTEM (OR APPROVED EQUAL) OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x4 WOOD STUDS AT 24" O.C. WITH 5/8" GYP. BD. INTERIOR. REFER TO ELEVATIONS FOR STONE LOCATIONS
- NOT USED.
- NOT USED.
- EXTERIOR WALL CONSTRUCTION - 2x6 AT 24" O.C. HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x6 WOOD STUDS AT 24" O.C. WITH R-21 KRAFT-FACED BATT INSULATION AND 5/8" GYP. BD. INTERIOR.
- EXTERIOR WALL CONSTRUCTION - 2x4 AT 24" O.C. HORIZONTAL SIDING OVER TYVEK WRAP OVER 7/16" O.S.B. EXT. GRADE SHEATHING OVER 2x4 WOOD STUDS AT 24" O.C. WITH 5/8" GYP. BD. INTERIOR. REFER TO ELEVATIONS FOR STONE LOCATIONS
- NOT USED.
- EXTERIOR WALL CONSTRUCTION - 2x4 AT 24" O.C. STONE VENEER OVER 1/16" PROSOCO R-GUARD SYSTEM (OR APPROVED EQUAL) OVER 2x6 WOOD STUDS AT 24" O.C. WITH 5/8" GYP. BD. INTERIOR. REFER TO ELEVATIONS FOR STONE LOCATIONS
- ONE-HOUR RATED SEPARATION WALL - 2x4 AT 24" O.C. (1) LAYER 5/8" TYPE 'X' GYP. BD. ONE SIDE OF 2x4 WOOD STUDS AT 24" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION, 1" AIR SPACE, 2x4 WOOD STUDS AT 16" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION AND (1) LAYER 5/8" TYPE 'X' GYP. BD. 1 HOUR RATING PER U.L. 341. SEE 1/A5.1, 5/A5.1, AND SHEET A5.0.
- ONE-HOUR RATED SEPARATION WALL - 2x4 AT 16" O.C. (1) LAYER 5/8" TYPE 'X' GYP. BD. ONE SIDE OF 2x4 WOOD STUDS AT 16" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION, 1" AIR SPACE, 2x4 WOOD STUDS AT 16" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION AND (1) LAYER 5/8" TYPE 'X' GYP. BD. 1 HOUR RATING PER U.L. 341. SEE 1/A5.1, 5/A5.1, AND SHEET A5.0.

**WALL TYPE LEGEND (CONT'D)**

- GARAGE / UNIT SEPARATION WALL - 2x6 AT 24" O.C. 2x6 WOOD STUDS AT 24" O.C. WITH 5/8" TYPE 'X' GYP. BD. EACH SIDE WITH R-21 KRAFT-FACED BATT INSULATION. BUILD WALL TIGHT TO TRUSS BOTTOM CHORD. SEE 3/A5.2.
- ONE-HOUR RATED SEPARATION WALL - 2x4 AT 16" O.C. (1) LAYER 5/8" TYPE 'X' GYP. BD. ONE SIDE OF 2x4 WOOD STUDS AT 16" O.C. WITH 1" AIR SPACE, 2x4 WOOD STUDS AT 16" O.C. AND (1) LAYER 5/8" TYPE 'X' GYP. BD. 1 HOUR RATING PER G.A. FILE NO. WP3370. SEE 1/A5.1, 5/A5.1, AND SHEET A5.0.
- TWO-HOUR RATED SEPARATION WALL - 2x4 AT 16" O.C. (2) LAYERS 5/8" TYPE 'X' GYP. BD. ONE SIDE OF 2x4 WOOD STUDS AT 16" O.C. WITH 3 1/2" SOUND ATTENUATING BATT INSULATION, 1" AIR SPACE, 2x4 WOOD STUDS WITH 3 1/2" SOUND ATTENUATING BATT INSULATION AND (2) LAYERS 5/8" TYPE 'X' GYP. BD. ONE SIDE. BUILD WALL TIGHT TO UNDERSIDE OF ROOF SHEATHING. (G.A. FILE # WP3820) SEE 4/A5.1 AND SHEET A5.0.



**REVISIONS**

7/20/22 PLAN REVIEW & OWNER CHANGE

phone 330.666.5770  
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3660 Embassy Parkway  
Fairlawn, OH 44333  
mpg-architects.com



WILLOWOOD MID RIGHT PLAN  
DATE: APRIL 8, 2022  
PROJECT #: 31121  
REDWOOD THE HARRISON PHASE IV  
RED BUCKEYE DRIVE  
HUBER HEIGHTS, OHIO 45371



**All Redwood Contractors and Subcontractors**

The construction of all Redwood apartments and site improvements must comply with all FHA (Fair Housing Act) standards and accessibility requirements. All contractors are required to build Redwood apartment units based on site specific plans and follow the FHA details as described on all of the items noted on these three FHA sheets. Construction that does not follow FHA accessibility requirements will not be accepted by Redwood.

phone 330.666.5770  
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 3660 Embassy Parkway  
 Fairlawn, OH 44333  
 mp-architects.com

**MPG**  
 MANN • PARSONS • GRAY  
 ARCHITECTS



FHA DESIGN STANDARDS

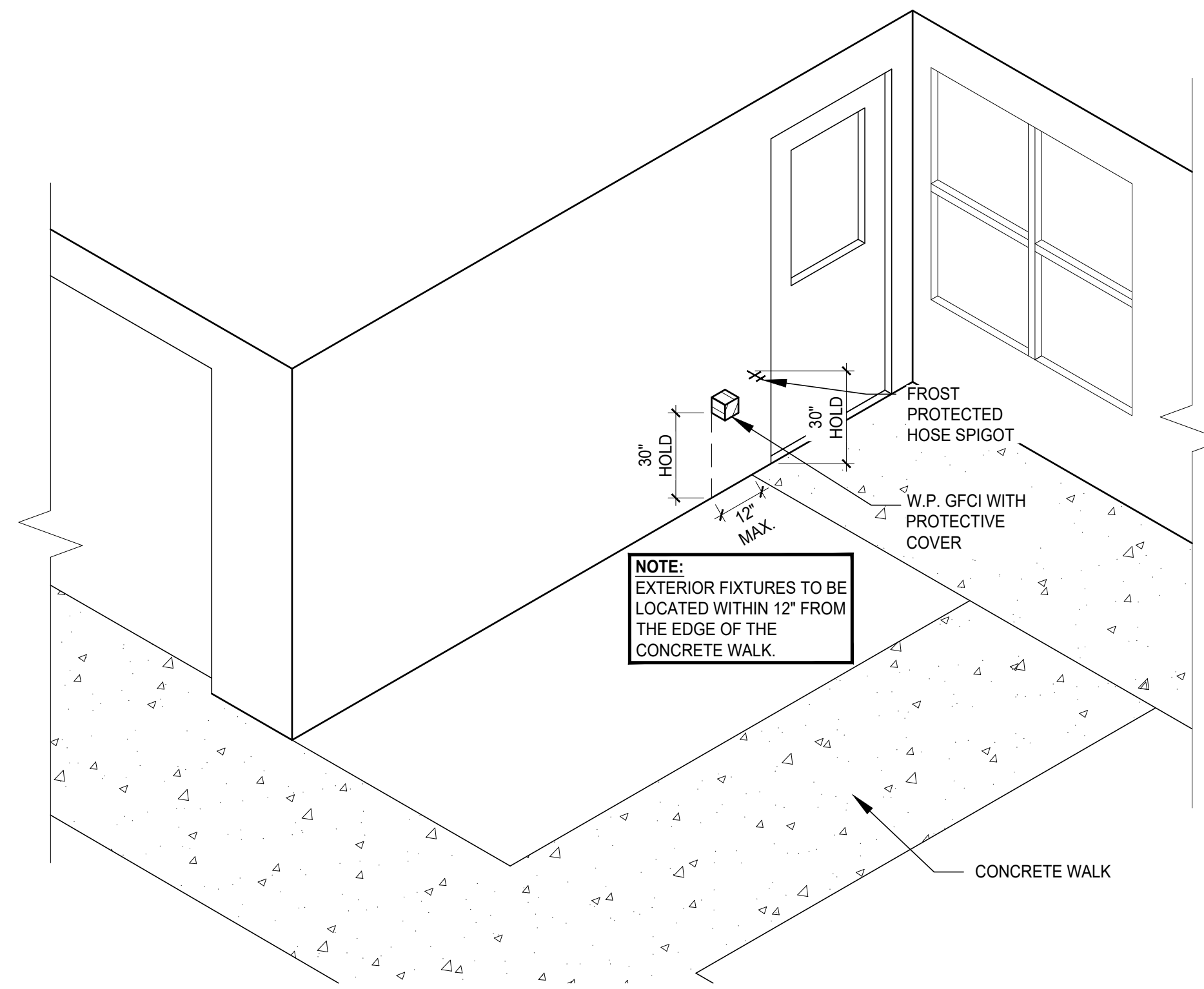
DATE: JULY 27, 2022

PROJECT #: 33521

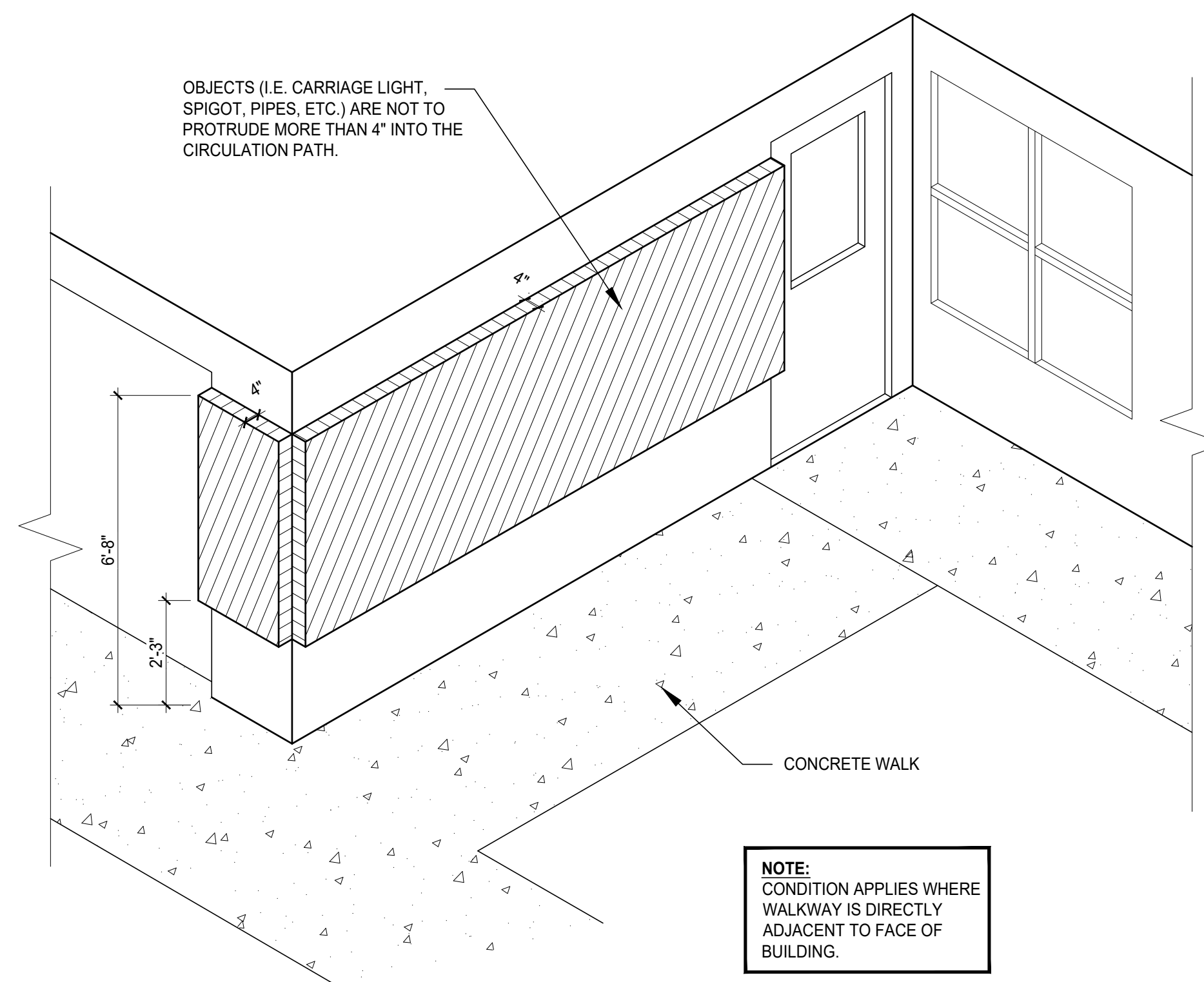
REDWOOD MIAMISBURG

MIAMISBURG OH, 45449

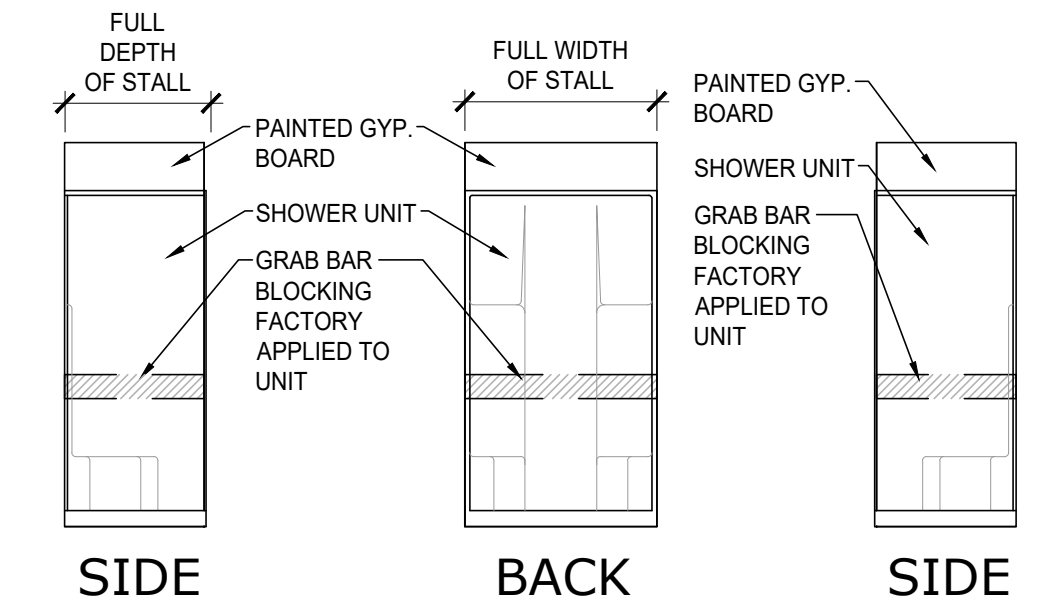
**FHA 1.1**  
 2 OF 3



**EXTERIOR FIXTURE LOCATIONS**  
 NO SCALE



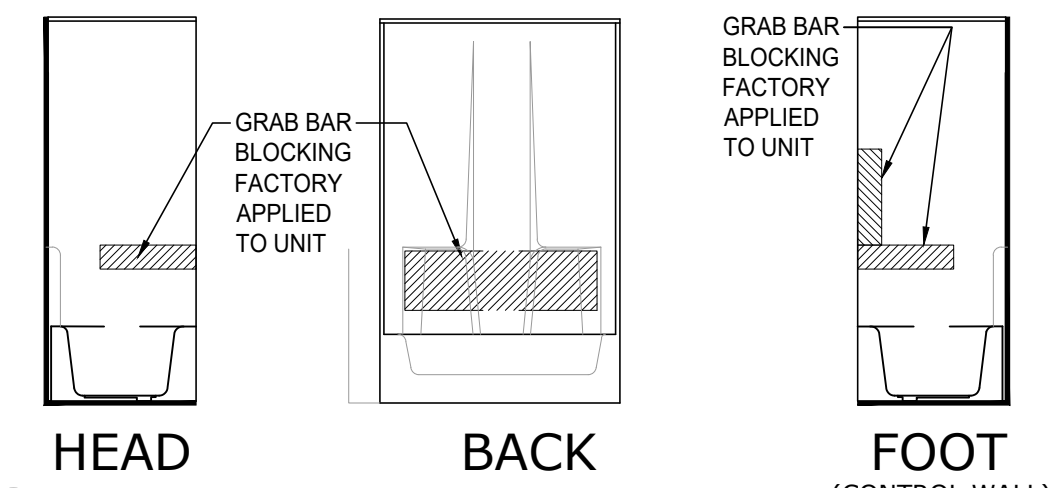
**PROTRUDING OBJECT LIMITS**  
 NO SCALE



**4 TYPICAL BLOCKING**

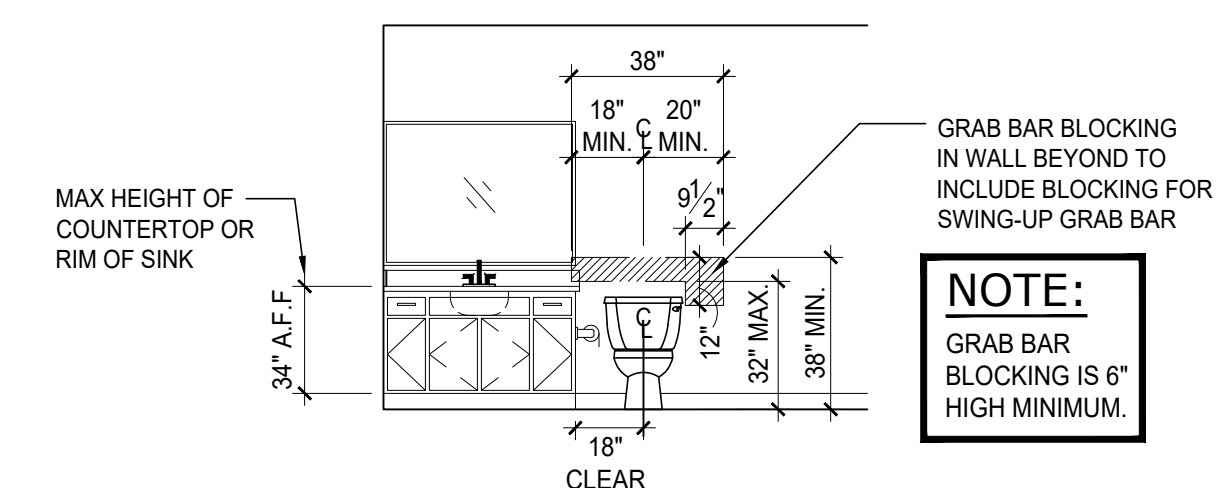
SCALE: 1/4" = 1'-0" FHA COMPLIANT SHOWER

**NOTE:**  
 BLOCKING FOR FUTURE INSTALLATION OF GRAB BARS IS TO BE FACTORY INSTALLED BY THE MANUFACTURER OF THE FIXTURE. BLOCKING IS TO MEET ALL REQUIREMENTS OF THE RESIDENTIAL CODE INCLUDING SIZE & LOCATION AS WELL AS LOAD REQUIREMENTS



**3 TYPICAL BLOCKING**

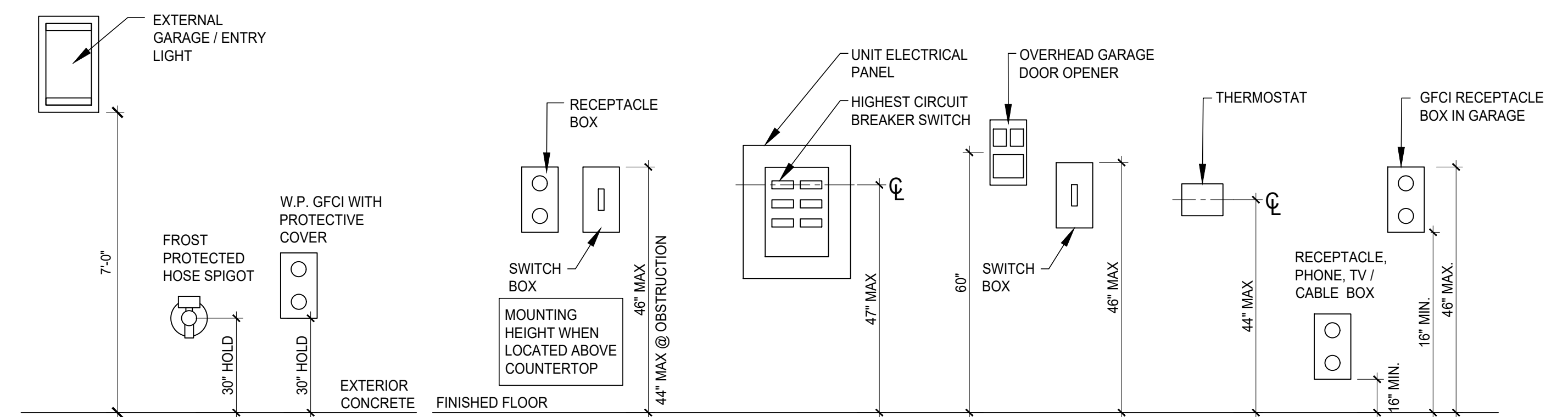
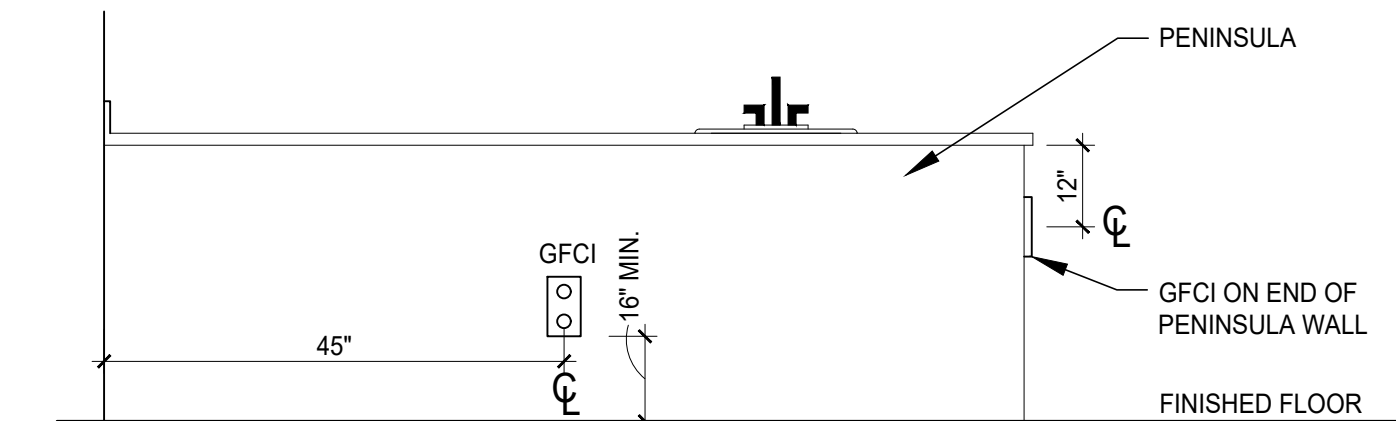
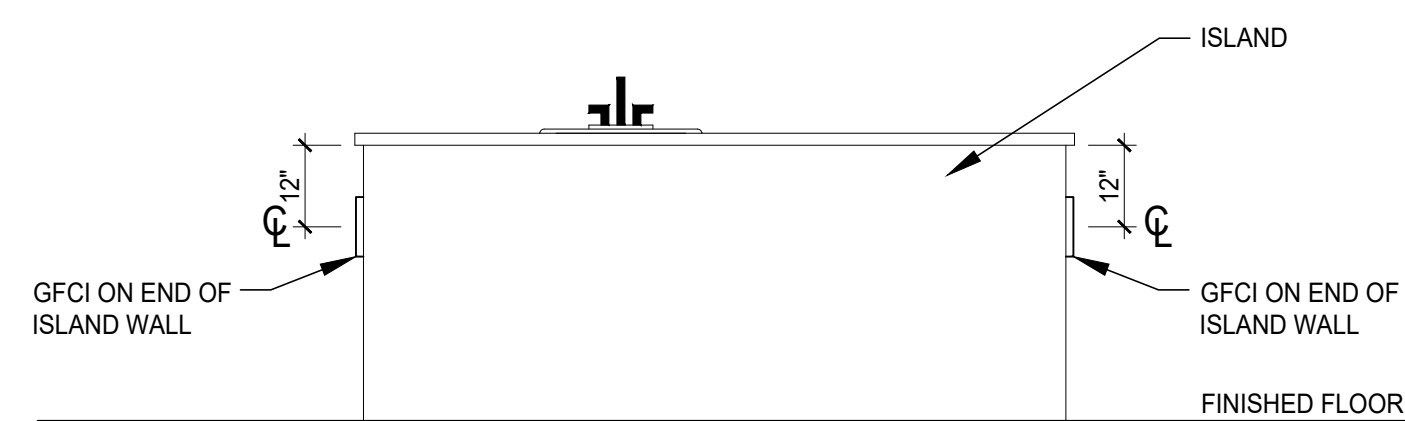
SCALE: 1/4" = 1'-0" FHA COMPLIANT TUB



**NOTE:**  
 GRAB BAR BLOCKING IS 6" HIGH MINIMUM.

**2 BATH #2**

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



**1 MOUNTING HEIGHTS**

SCALE: NOT TO SCALE

REVISIONS

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**MPG**  
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**Redwood**  
 APARTMENT NEIGHBORHOODS

INTERIOR ELEVATIONS

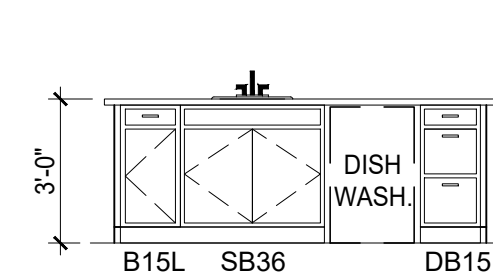
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PROJECT #: 33521

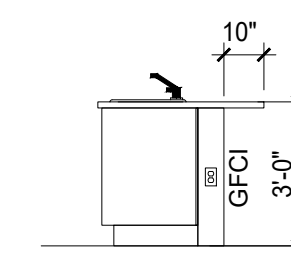
REDWOOD MIAMISBURG

MIAMISBURG OH, 45449

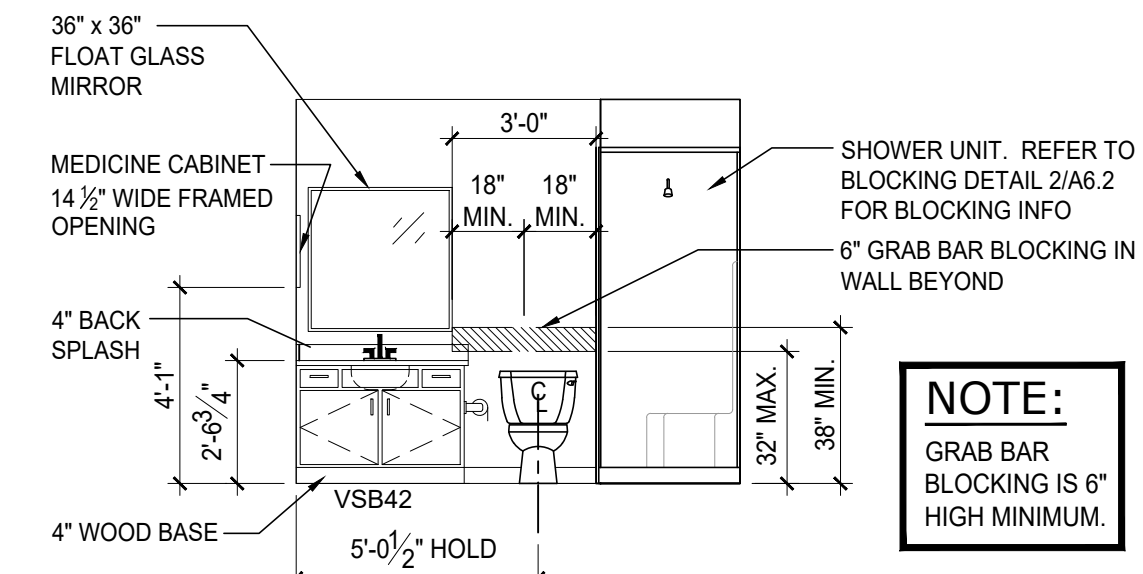
**A6.2**  
 131 OF 137



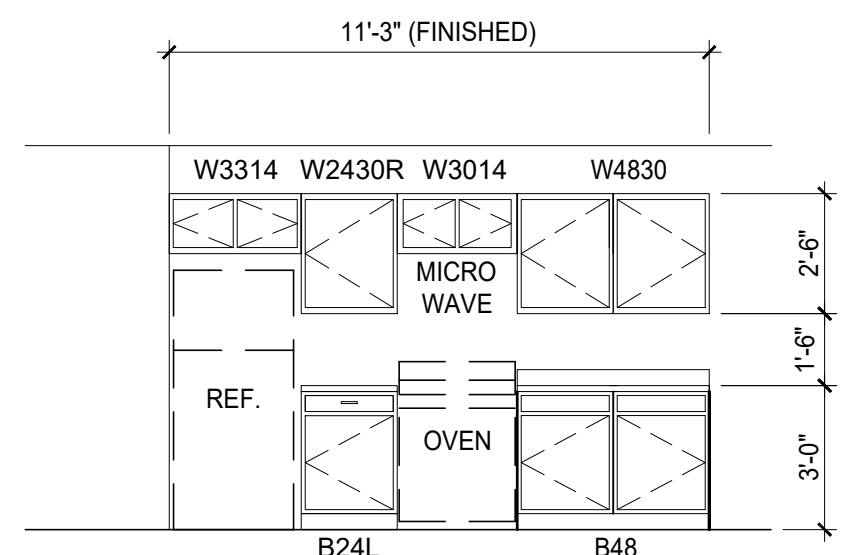
**17 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 CAPEWOOD, WILLOWOOD, BREEZEWOOD SUNROOM



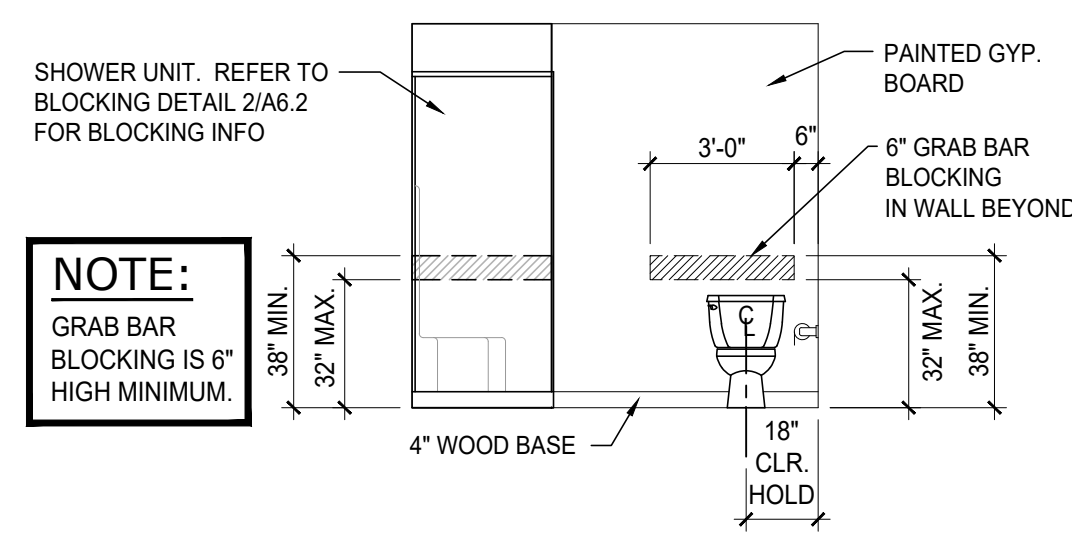
**12 KITCHEN**  
 SCALE: 1/4" = 1'-0"



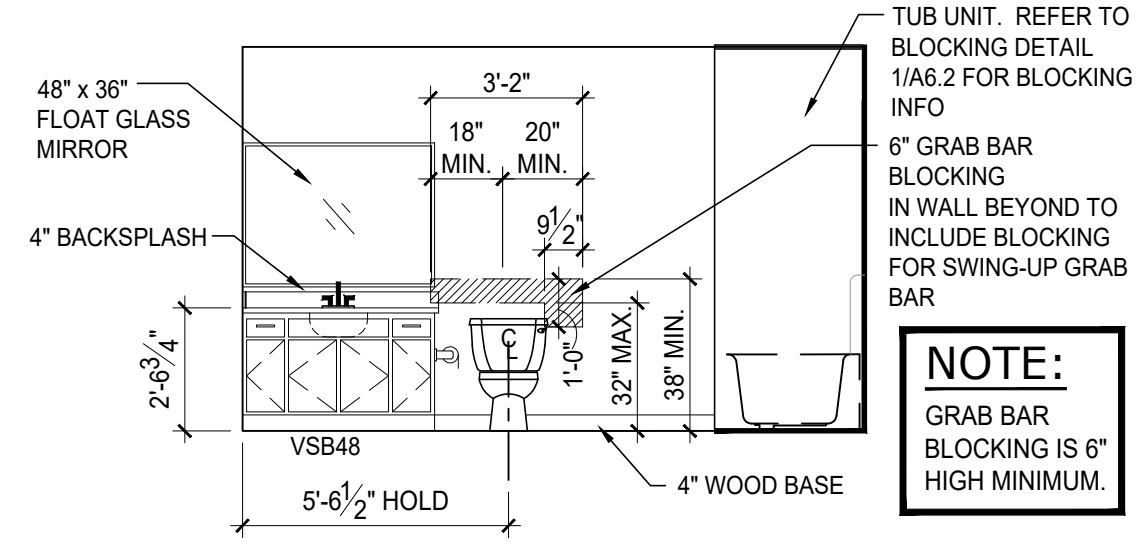
**5 MASTER BATH**  
 SCALE: 1/4" = 1'-0"  
 FORESTWOOD



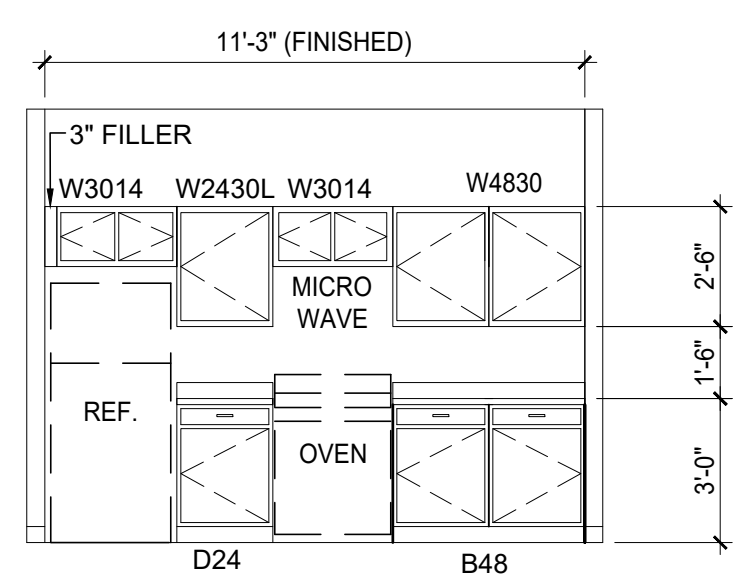
**16 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 WILLOWOOD



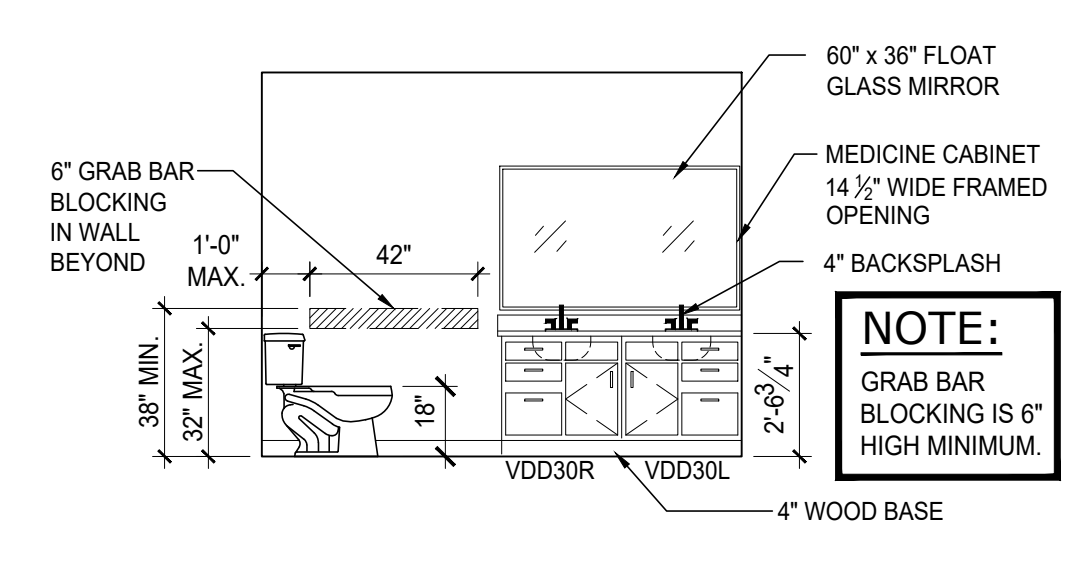
**11 MASTER BATH**  
 SCALE: 1/4" = 1'-0"  
 BREEZEWOOD



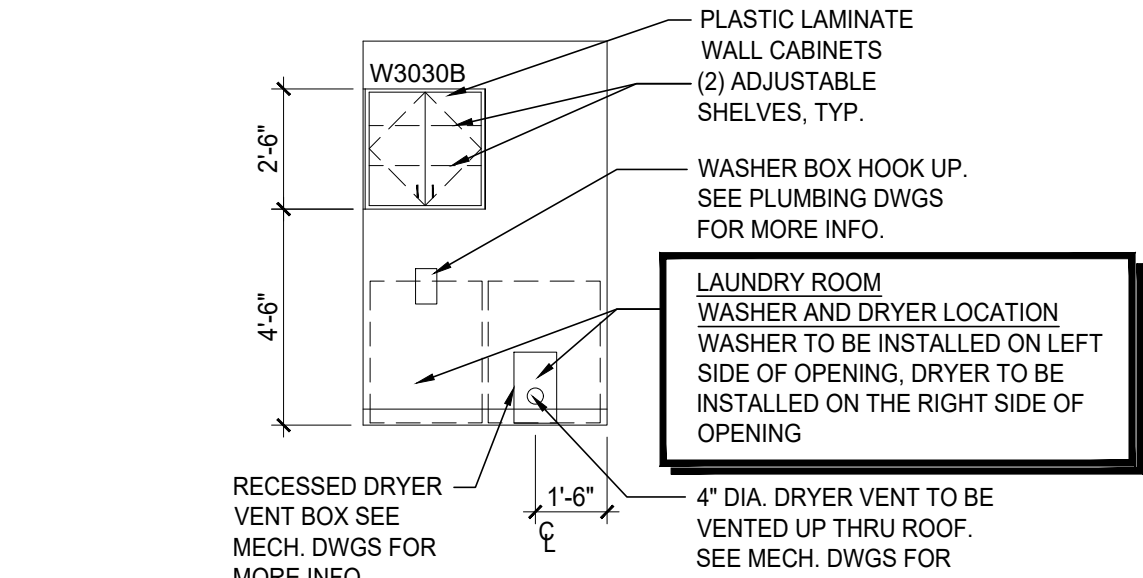
**4 BATH #2**  
 SCALE: 1/4" = 1'-0"  
 FORESTWOOD, CAPEWOOD, MEADOWOOD, WILLOWOOD, BREEZEWOOD, BREEZEWOOD SUNROOM



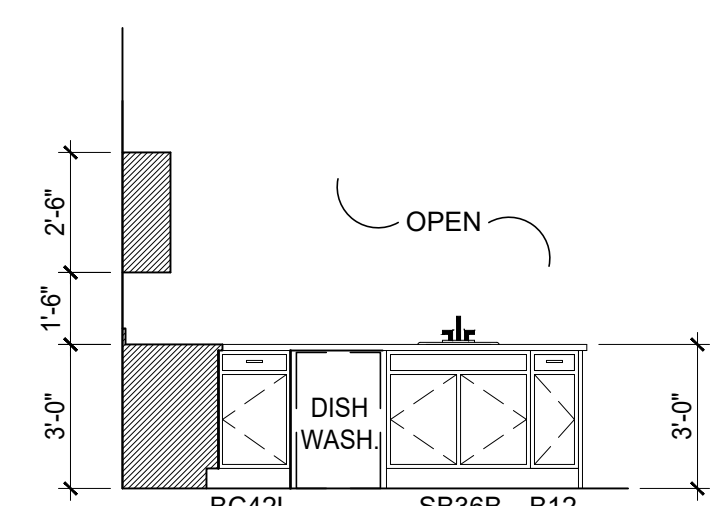
**15 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 CAPEWOOD, BREEZEWOOD SUNROOM



**10 MASTER BATH**  
 SCALE: 1/4" = 1'-0"  
 BREEZEWOOD



**3 LAUNDRY - ALL UNITS**  
 SCALE: 1/4" = 1'-0"

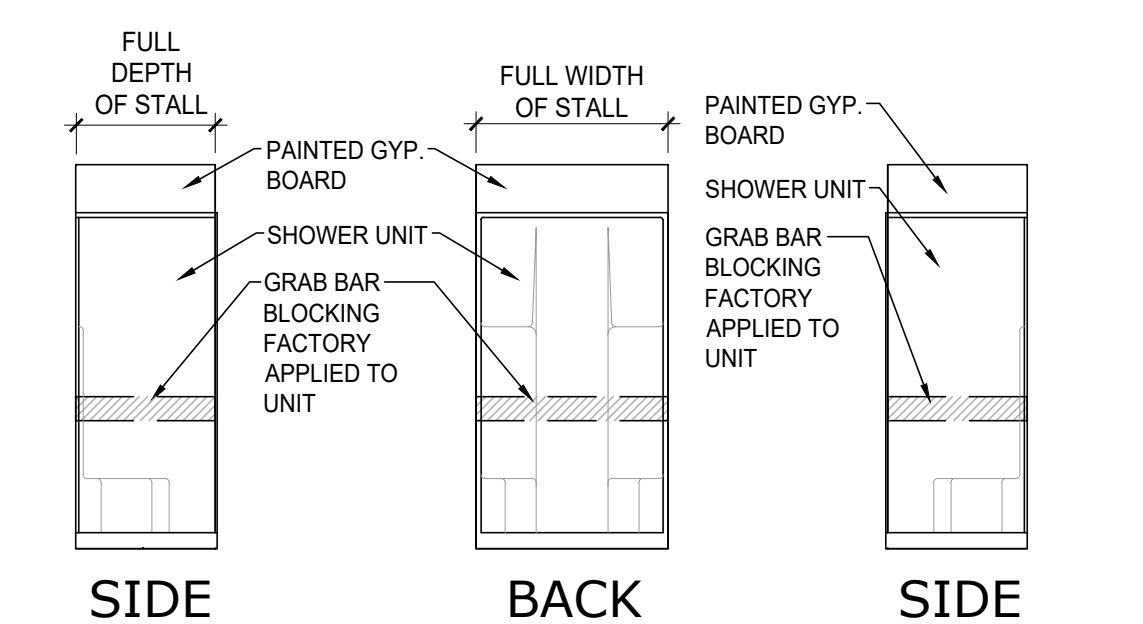


**14 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 TYPICAL ALL PENINSULA KITCHEN TYPES

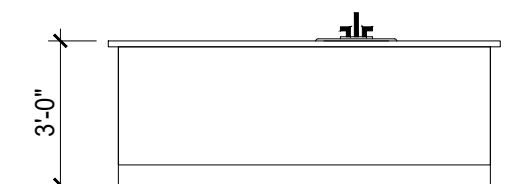
**9 NOT USED**  
 SCALE: 1/4" = 1'-0"

**8 NOT USED**  
 SCALE: 1/4" = 1'-0"

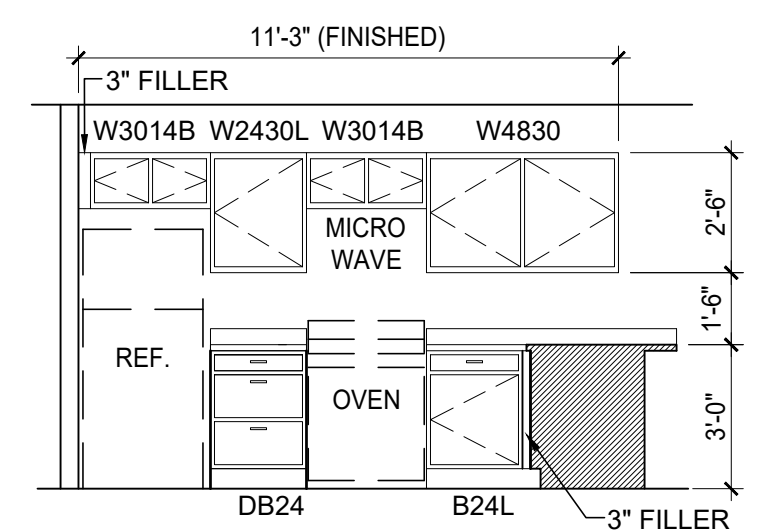
**7 NOT USED**  
 SCALE: 1/4" = 1'-0"



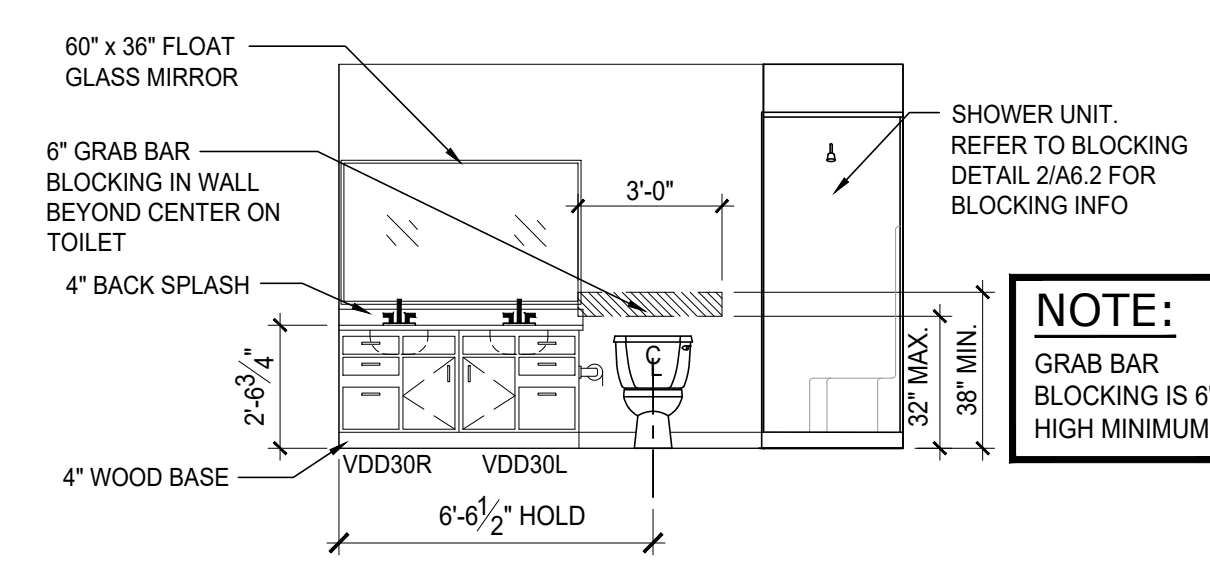
**2 TYPICAL BLOCKING**  
 SCALE: 1/4" = 1'-0"  
 FHA COMPLIANT SHOWER



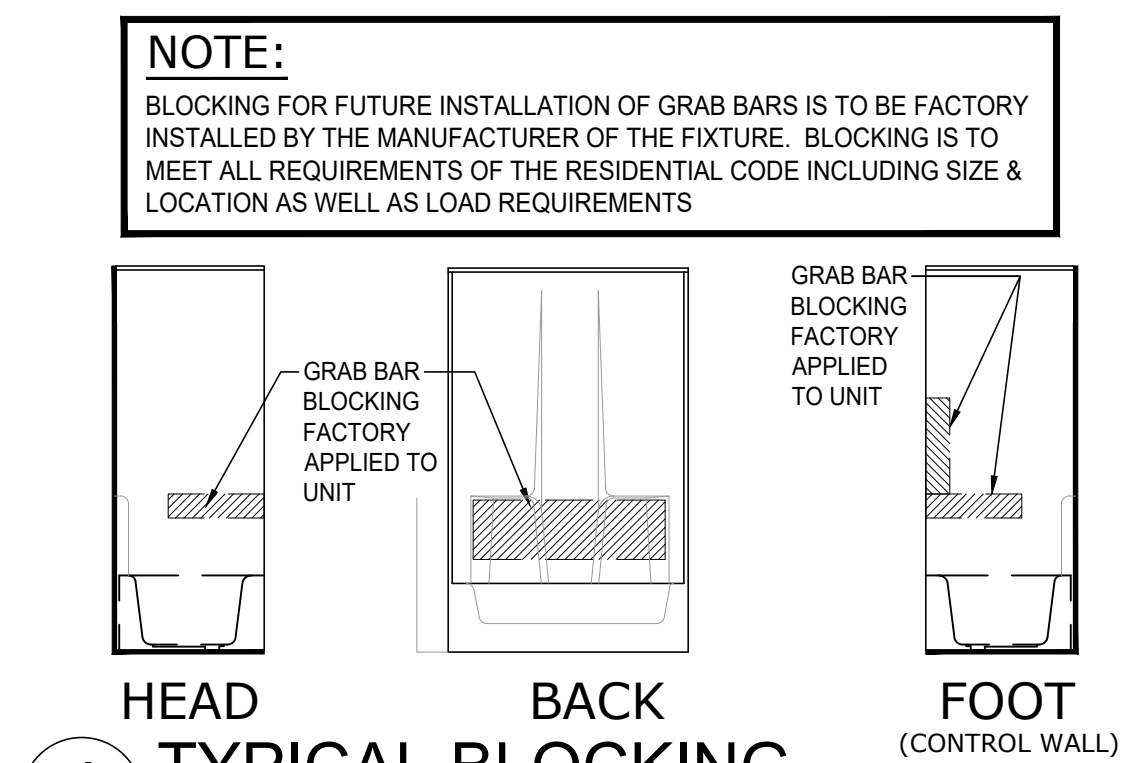
**18 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 CAPEWOOD, WILLOWOOD, BREEZEWOOD SUNROOM



**13 KITCHEN**  
 SCALE: 1/4" = 1'-0"  
 FORESTWOOD, MEADOWOOD, BREEZEWOOD



**6 MASTER BATH**  
 SCALE: 1/4" = 1'-0"  
 MEADOWOOD, CAPEWOOD, WILLOWOOD, BREEZEWOOD SUNROOM



**1 TYPICAL BLOCKING**  
 SCALE: 1/4" = 1'-0"  
 FHA COMPLIANT TUB

## DOOR SCHEDULE - LEASING OFFICE / STORAGE

ROOM NAME	DOOR		FRAME		HARDWARE	REMARKS
	TYPE	SIZE	MATERIAL	MATERIAL		
ENTRY	7	3'-0" x 6'-8" x 1 3/4"	STL/GL	WPH	5	THRESHOLD, WEATHER STRIPPING, SELF-CLOSING SPRING HINGES
PETWASH	1	3'-0" x 6'-8" x 1 3/4"	STL/GL	WPH	5	THRESHOLD, WEATHER STRIPPING, SELF-CLOSING SPRING HINGES
RESTROOM	3	3'-0" x 6'-8" x 1 3/8"	HCWD	WPH	1	-
WATER HEATER CLOSET	3	2'-8" x 6'-8" x 1 3/8"	HCWD	WPH	8	-
OFFICE	3	3'-0" x 6'-8" x 1 3/4"	HCWD	WPH	4	-
STORAGE - ENTRY	2	3'-0" x 6'-8" x 1 3/4"	STL	WPH	2	THRESHOLD, WEATHER STRIPPING, SELF-CLOSING SPRING HINGES
STORAGE - KITCHEN ENTRY	3	3'-0" x 6'-8" x 1 3/4"	STL	WPH	7	THRESHOLD, WEATHER STRIPPING, SELF-CLOSING SPRING HINGES, JAMBS FOR 2x4 WALL
STORAGE	6	16'-0" x 7'-0"	STL	-	3	INSULATED STEEL OVERHEAD DOOR

## ROOM FINISH SCHEDULE - LEASING OFFICE / STORAGE

ROOM NAME	FLOOR	BASE	WALLS				CEILING MATL.	CEILING HT.	REMARKS
			NORTH	EAST	SOUTH	WEST			
ENTRY	VP	B1	W1	W1	W1	W1	C1	8'-0"	-
LEASING	VP	B1	W1	W1	W1	W1	C1	8'-0"	-
PET WASH	CONC	B5	W3	W3	W3	W3	C1	8'-0"	FULL HEIGHT FIBER REINFORCED PANELS
OFFICE	VP	B1	W1	W1	W1	W1	C1	8'-0"	-
RESTROOM	VP	B4	W1/W2	W1	W1/W2	W1/W2	C1	8'-0"	-
KITCHEN	VP	B1	W1	W1	W1	W1	C1	8'-0"	-
STORAGE	CONC	B5	W1	W1	W1	W1/W2	C1	8'-0"	FRP BEHIND AND TO SIDE OF MOP SINK
WATER HEATER CLOSET	CONC	B3	W1	W1	W1	W1	C1	8'-0"	-

### ROOM FINISH NOTES

- THE TRANSITION BETWEEN DIFFERENT FLOOR FINISHES BETWEEN ROOMS SHALL OCCUR DIRECTLY BELOW THE CENTERLINE OF ALL DOORS IN THEIR CLOSED POSITION.

### FINISH LEGEND:

#### FLOORS:

- VP VINYL PLANK (PER SPECIFICATION)  
CONC SEALED CONCRETE

#### BASE:

- B1 3" PAINTED BASE (MDF)  
B2 NOT USED.  
B3 EXPOSED  
B4 6" RUBBER COVE BASE (GRAY) COLOR TO BE COORDINATED BY CONTRACTOR WITH OWNER/INTERIOR DESIGNER.  
B5 4" AZEK TRIM, COLOR: WHITE.

#### WALLS:

- W1 PAINTED GYPSUM BOARD, (1) COAT LATEX PRIMER, (2) COAT LATEX, FLAT - COLOR TO BE COORDINATED BY CONTRACTOR WITH OWNER/INTERIOR DESIGNER.  
W2 FIBER REINFORCED PANEL (WHITE) TO + 48" A.F.F.  
W3 FIBER REINFORCED PANEL (WHITE) FULL WALL HEIGHT, OVER WATER RESISTANT GYPSUM BOARD (GREEN-BOARD)

#### CEILING:

- C1 KNOCK-DOWN PLASTER FINISH.

### FLAME & SMOKE RATING INDEX

#### ENCLOSED AREAS, SPACES, OR ROOMS

INTERIOR FINISH OF WALLS AND CEILINGS SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THE FOLLOWING FOR USE GROUPS:

WALLS & CEILINGS:	B	S-1
FLOORS:	CLASS C	CLASS C
	CLASS DOC FF1	CLASS DOC FF1

#### EXIT ACCESS CORRIDORS

INTERIOR FINISH OF INTERIOR ACCESS CORRIDORS SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THE FOLLOWING FOR USE GROUPS:

WALLS:	B	S-1
CEILINGS:	CLASS A	CLASS B
FLOORS:	CLASS A	CLASS B
	CLASS II	CLASS II

ALL OTHER AREAS SHALL COMPLY WITH THE DOC FF1 "PILL TEST" INCLUDING CARPET.

#### VERTICAL EXITS, EXITWAYS

INTERIOR FINISH OF WALLS AND CEILINGS SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THE FOLLOWING FOR USE GROUPS:

WALLS:	B	S-1
CEILINGS:	CLASS B	CLASS B
FLOORS:	CLASS B	CLASS B
	CLASS II	CLASS II

### GENERAL DOOR, FRAME & HARDWARE NOTES

- CONTRACTOR & SUPPLIER SHALL COORDINATE ALL ASPECTS OF HARDWARE SCHEDULE WITH FABRICATION & INSTALLATION OF DOORS & FRAMES.
- ALL DOORS (UNLESS NOTED OTHERWISE) SHALL HAVE LEVER-OPERATED HARDWARE PER SECTION 404.2.6 I.C.C. A117.1 - 2009. AND SHALL MEET THE REQUIREMENTS OF OBC 1010.1.9 AND BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- IT SHALL BE THE RESPONSIBILITY OF THE SUCCESSFUL HARDWARE SUPPLIER TO PROPERLY SIZE ALL HARDWARE.
- SEE FLOOR PLANS FOR ALL DOOR SWING DIRECTIONS.

### ABBREVIATIONS

- HCWD WOOD (DOORS) - HOLLOW CORE WOOD DOOR(S), STAINED BY CONTRACTOR, COLOR BY OWNER  
STL INSULATED PREMIUM STEEL PANEL STYLE (DOORS)  
WPH WOOD PRE-HUNG (FRAMES)  
T TEMPERED GLAZING (INSULATED GLASS)

### DOOR HARDWARE SETS

- SET 1 (PRIVACY)  
3 BUTT HINGES  
1 PRIVACY LOCKSET  
1 HINGE STOP
- SET 2 (ENTRANCE)  
3 BUTT HINGES  
SELF-CLOSING, SPRING TYPE  
1 ENTRANCE LOCKSET  
1 DEAD BOLT  
1 ALUM. ADA THRESHOLD  
1 WEATHER STRIP  
1 HINGE STOP
- SET 3 (PATIO / CLOSET / GARAGE)  
MANUFACTURERS HARDWARE
- SET 4 (PASSAGE)  
3 BUTT HINGES  
1 PASSAGE SET  
1 HINGE STOP
- SET 5 (OFFICE)  
3 BUTT HINGES  
SELF-CLOSING, SPRING TYPE  
1 ENTRANCE LOCKSET  
1 DEAD BOLT (THUMB TURN INSIDE)  
1 ALUM. ADA THRESHOLD  
1 WEATHER STRIP  
1 HINGE STOP
- SET 6 (PASSAGE)  
NOT USED
- SET 7  
3 BUTT HINGES  
SELF-CLOSING, SPRING TYPE  
1 ENTRANCE LOCKSET  
1 ALUM. ADA THRESHOLD  
1 WEATHER STRIP  
1 HINGE STOP
- SET 8  
3 BUTT HINGES  
1 ENTRANCE LOCKSET  
1 HINGE STOP

### DOOR SCHEDULE NOTES:

CONTRACTOR & SUPPLIER SHALL COORDINATE ALL ASPECTS OF HARDWARE SCHEDULE WITH FABRICATION & INSTALLATION OF DOORS AND FRAMES.

### DOOR AND WINDOW NOTES

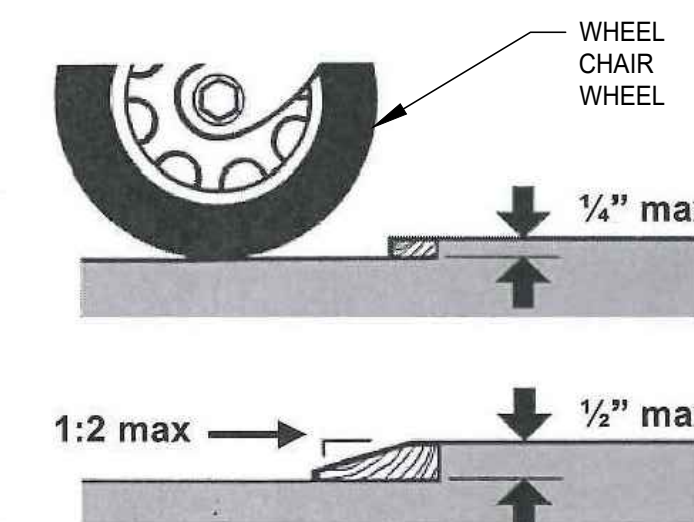
- WINDOWS ARE BASED ON SIMONTON STANDARD WINDOW SIZES. SUBMIT ALTERNATE WINDOWS BASED ON NEAREST AVAILABLE STANDARD SIZE. SUBJECT TO OWNERS APPROVAL.
- NOT USED.
- DOORS ARE TO BE UNDERCUT 1" ABOVE FLOORING FOR RETURN AIR.

### LEASING OFFICE - RESTROOM FIXTURE SCHEDULE

(COORDINATE ALL SPECIFIED HEIGHTS BELOW WITH INT. ELEVATIONS)

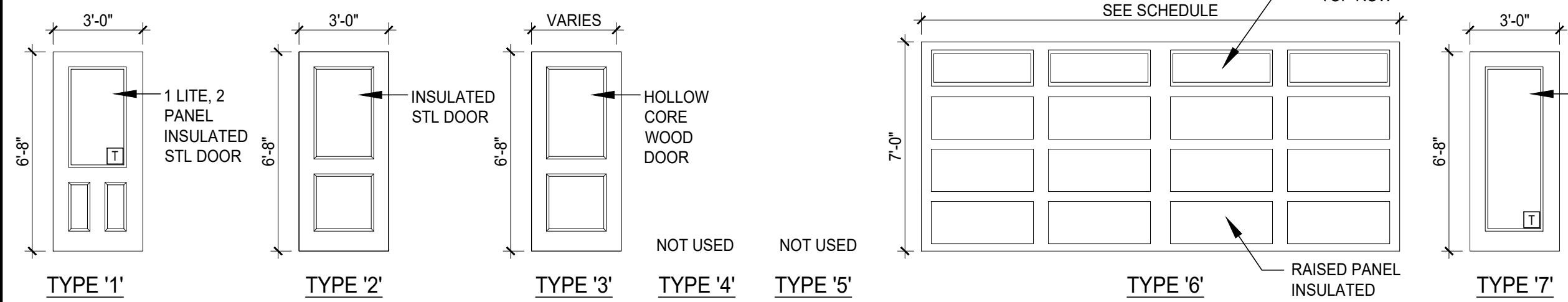
- H.C. TOILET W/ ELONGATED OPEN FRONT SEAT (FLOOR MTD. W/ RIM HEIGHT AT 17" A.F.F.). SEE PLUMBING DRAWINGS FOR TOILET MODEL NUMBER.
  - TOILET TISSUE DISPENSER (MTD. 36" FROM PLUMBING WALL. SEE ELEV. FOR MOUNTING HEIGHT). MODEL: AS SELECTED BY OWNER
  - STAINLESS STEEL H.C. TOILET GRAB BAR SET W/ SATIN FINISHED SURFACE: ONE 36"L BEHIND WATER CLOSET (MTD. MAX 6" FROM SIDE WALL AND 36" A.F.F. TO  $\epsilon$ ), ONE 42"L GRAB BAR ON SIDE WALL (MTD. 12" MIN. FROM BACK OF WATER CLOSET AND 36" A.F.F. TO  $\epsilon$ ), ONE 18"L VERTICAL GRAB BAR ON SIDE WALL (MTD. 41" MAX. FROM BACK OF WATER CLOSET AND 41" A.F.F. TO  $\epsilon$ ). MODEL: BOBRICK B-6806, STAINLESS STEEL, SATIN FINISH (0.05" THICK), CONCEALED MOUNTING. GRAB BARS TO WITHSTAND A DOWNWARD LOAD OF AT LEAST 250 LBF, WHEN TESTED IN ACCORDANCE WITH ASTM F446.
  - WALL MOUNTED LAVATORY, PROVIDE SUPPORT BRACKETS AS REQUIRED (MTD. TOP OF LAVATORY 34" A.F.F.). SEE PLUMBING DRAWINGS FOR LAVATORY MODEL NUMBER. PLUMBER TO PROVIDE UNDER LAVATORY GUARD FOR EACH HANDICAP LAVATORY.
  - MIRROR: MOUNT BOTTOM OF MIRROR @ 40" A.F.F. MAX. SHALL BE 1/4" FLOAT/PLATE GLASS WITH CONCEALED MOUNTING ASSEMBLY. PROVIDED BY LOCAL GLASS AND MIRROR COMPANY.
- \* PROVIDE FRTW BLOCKING BEHIND ALL ACCESSORIES BEING ATTACHED TO THE WALL. MOUNT WITH CONCEALED FASTENERS WHENEVER POSSIBLE.  
\* INSTALL ACCESSORIES USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.  
\* ADJUST ACCESSORIES FOR UNENCUMBERED, SMOOTH OPERATION AND VERIFY THAT MECHANISMS FUNCTION PROPERLY. REPLACE DAMAGED OR DEFECTIVE ITEMS. REMOVE TEMPORARY LABELS AND PROTECTIVE COATINGS.  
\* CONTRACTOR SHALL REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS FOR SPECIFIC INFORMATION ON THE ABOVE PLUMBING FIXTURES.

### Small Level Changes within the Unit



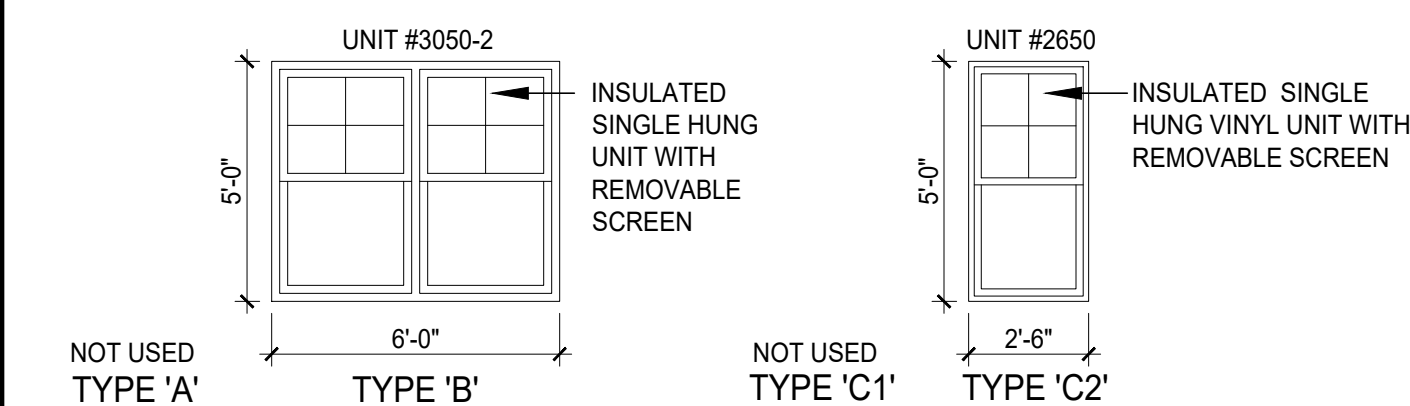
### CARPET/SHEET VINYL/PLANK FLOOR TRANSITION STRIP DETAIL

NO SCALE



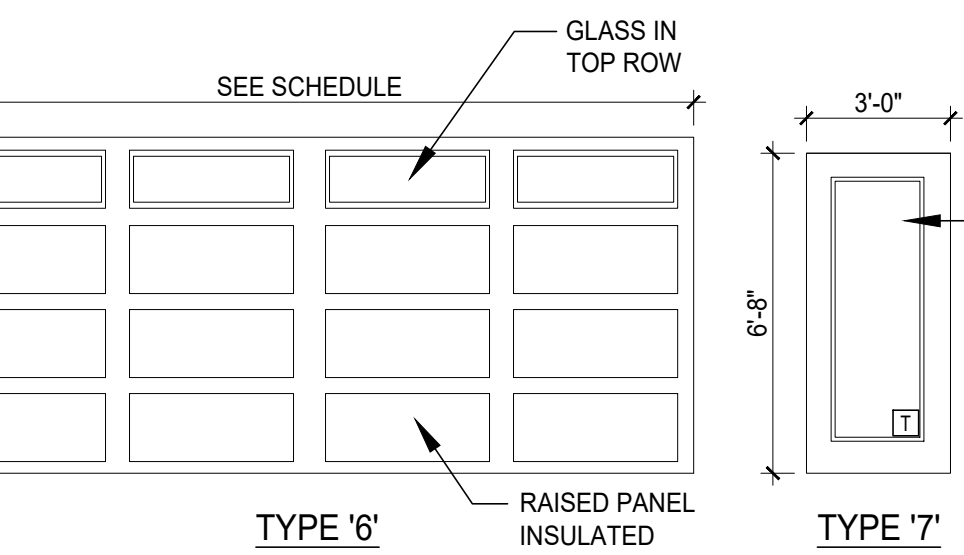
### DOOR TYPES

SCALE: 1/4" = 1'-0"  
DOOR ELEVATIONS TYPICALLY DO NOT SHOW HARDWARE



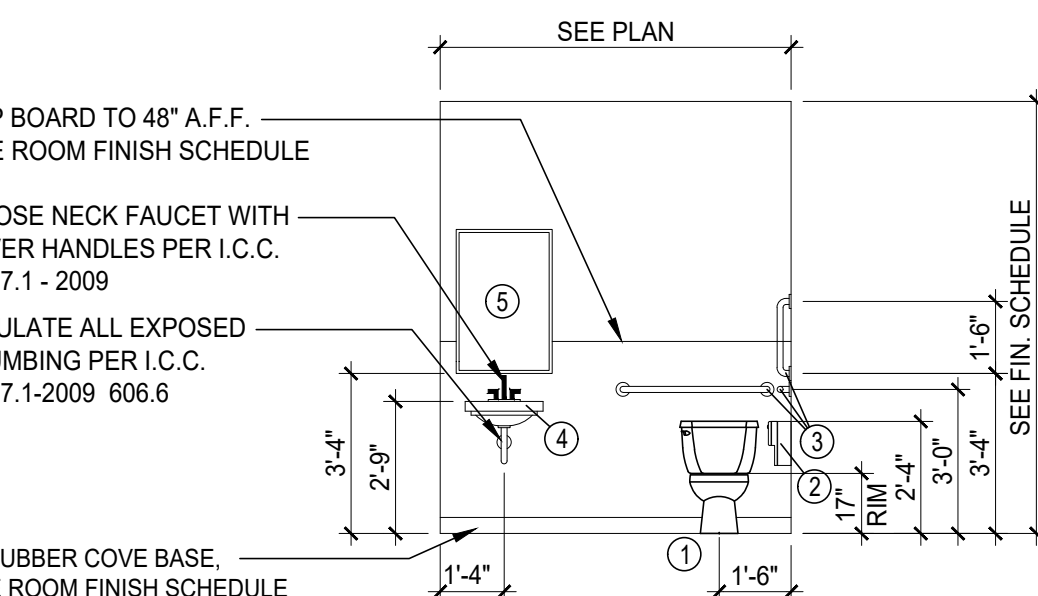
### WINDOW TYPES (INSULATED GLASS)

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



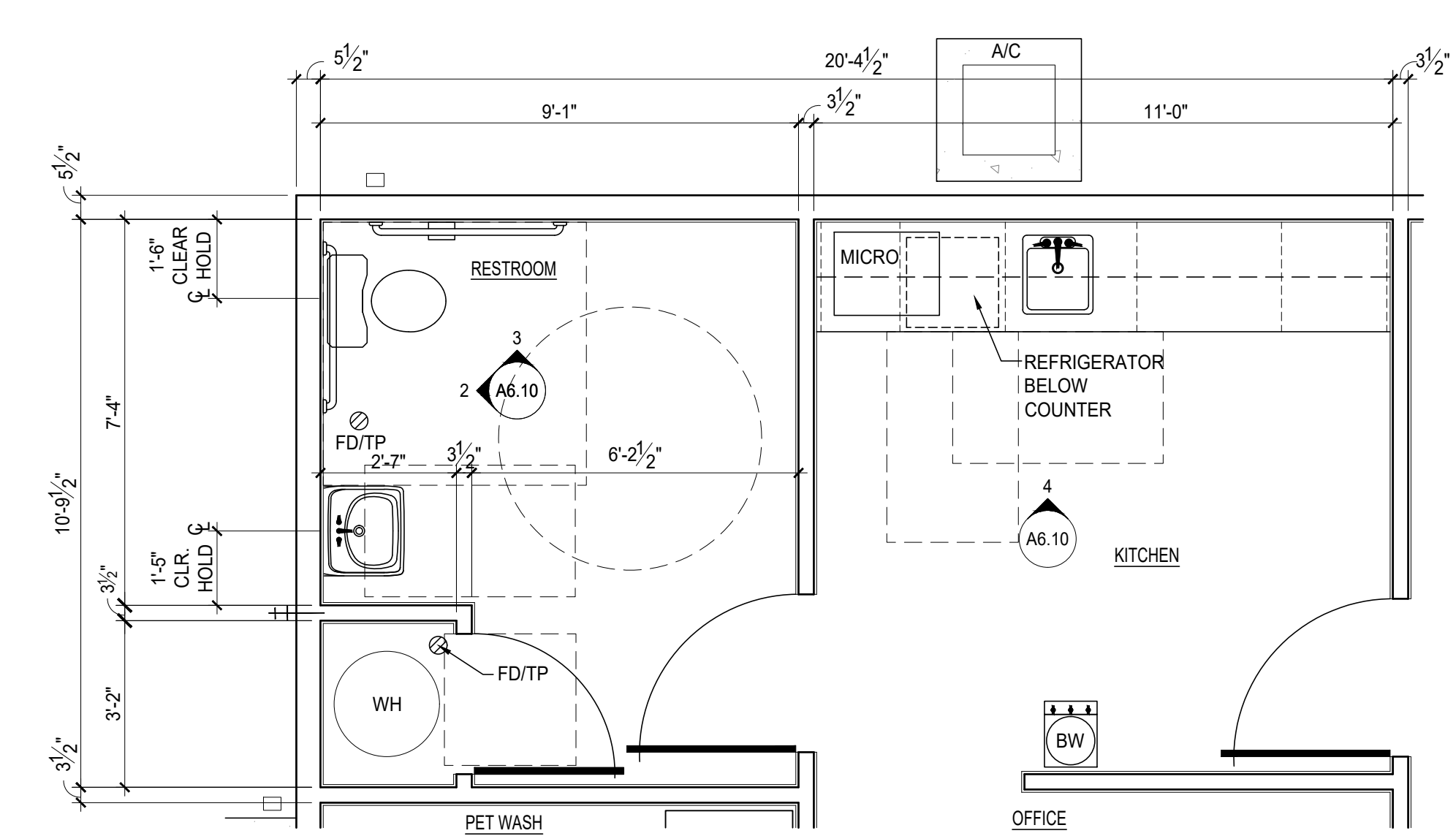
### 3 RESTROOM - LEASING OFFICE

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



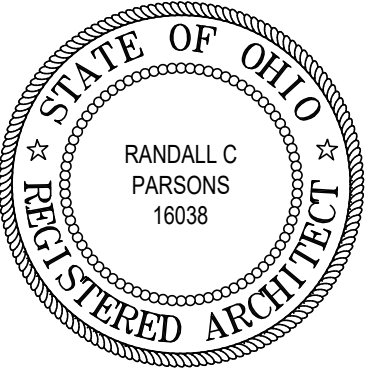
### 2 RESTROOM - LEASING OFFICE

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



### 1 LEASING OFFICE PLAN

SCALE: 3/8" = 1'-0"



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ENLARGED PLAN, INTERIOR ELEVATIONS

PROJECT #: 33521 DATE: JULY 27, 2022

REDWOOD MIAMISBURG

MIAMISBURG OH, 45449



A6.10

137 OF 137



PLUMBING FIXTURE SCHEDULE						
MARK	FIXTURE	WASTE	VENT	H.W.	C.W.	MANUFACTURER & MODEL NUMBER
WC1	FLOOR MOUNTED WATER CLOSET (ELONGATED) TANK TYPE	3"	2"	-	1/2"	"MANSFIELD" #137-160 "ALTO" SMARTHEIGHT GRAVITY FLUSH TOILET, VIT CHINA, 1.6 GALLON FLUSH, FLOOR MOUNTED W/CLOSE COUPLED TANK AND ELONGATED FRONT SIPHON JET BOWL WITH SOLID PLASTIC OR MOLDED WOOD ELONGATED CLOSED FRONT SEAT W/COVER, WATER CONTROL W/211 FLUSH VALVE AND 88 ANTI-SIPHON BALLCOCK, 16-3/4" HIGH BOWL (OR EQUAL).
LAV	UNDER COUNTER MOUNTED LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	UNDERCOUNTER MOUNTED LAVATORY "GERBER" LUXOVAL19"x15" OVAL BASIN, FRONT OVERFLOWS, 4" FAUCET CENTERS WITH "MOEN" #L-4621 FAUCET WITH 4" CENTERS, SINGLE LEVER HANDLE AERATOR, W/1.5 GPM FLOW RESTRICTOR, DRAIN W/ 1-1/4" TAILPIECE AND ADJUSTABLE P-TRAP, 3/8" ANGLE SUPPLY COCK AND RISERS, CHINA WHITE (OR EQUAL).
SK-1	SINGLE COMPART. SINK	1-1/2"	1-1/2"	1/2"	1/2"	STAINLESS STEEL UNDER MOUNT SINK, PRIMO MODEL "LARGE SINGLE", 33" OD X 18" OD X 9" DEEP, PROVIDE WITH PERFORATED GRID STRAINER, "CFG" CAPSTONE MODEL #CA40519SL DECK MOUNTED FAUCET WITH SINGLE HANDLE LEVER AND 59" PULLOUT SPRAY, CHROME PLATED, P-TRAP, AND STOPS WITH SUPPLIES, INSINKERATOR BADGER 1 FOOD WASTE DISPOSER (OR EQUAL).
TUB	TUB/SHOWER	1-1/2"	1-1/2"	1/2"	1/2"	"HAMILTON" TUB/SHOWER UNIT #G6032TSCS WITH "CFG" #4031C TUB/SHOWER TRIM WITH SLIP FIT TUB SPOUT, "CFG" MODEL #45311 VALVE (OR EQUAL).
SHWR	SHOWER	1-1/2"	1-1/2"	1/2"	1/2"	"HAMILTON" #G4895SH2S SHOWER UNIT w/ "CFG" #4031C SHOWER ONLY TRIM AND "CFG" MODEL #45311 VALVE (SINGLE LEVER), (OR EQUAL).
ET-1	EXPANSION TANK	-	-	-	-	"EXTROL" #5 EXPANSION TANK (OR EQUAL).
HB	HOSE BIB	-	-	-	-	"WOODFORD" CP-17 (OR EQUAL) WITH VACUUM BREAKER.
WB	WASHER BOX	-	-	-	-	"OATEY" #38530 PVC (OR EQUAL).
WH	WATER HEATER	-	-	-	-	"BRADFORD WHITE" #RE350S6 50 GALLON CAPACITY ELECTRIC WATER HEATER w/ 28" ALUMINUM DRIP PAN WITH DRAIN (OR EQUAL).
IMB-1	ICE MAKER BOX	-	-	-	1/2"	"OATEY" #391361 2K, 1/4 TURN, F1807, LOW LEAD - STANDARD PACK (OR EQUAL).

- NOTES:  
1. TOILET PAPER HOLDERS: PROVIDE TOILET PAPER HOLDER AT EACH WATER CLOSET.

PLUMBING SPECIFICATIONS	
I. SCOPE OF WORK	D. ALL UNDERGROUND SOIL, AND WASTE DRAINAGE PIPING INSIDE THE BUILDING AND TO A POINT 5'-0" OUTSIDE THE BUILDING SHALL BE CENTRIFUGALLY CAST SERVICE WEIGHT, BELL AND SPIGOT CAST IRON SOIL PIPE WITH SERVICE WEIGHT CAST IRON FITTINGS AND NEOPRENE GASKETS CONFORMING TO ASTM C-564, OR PLASTIC PVC SCHEDULE 40 CONFORMING TO ASTM D-2665 OR ABS PIPE.
A. FURNISH AND INSTALL SANITARY SEWER, STORM, STORM SEWER, VENT SYSTEM, DOMESTIC HOT AND COLD WATER AND NATURAL GAS SYSTEM AS SHOWN ON DRAWINGS.	E. DRAIN, WASTE AND VENT PIPING (ABOVE GROUND) MAY BE SERVICE WEIGHT CAST IRON PIPE WITH BELL AND SPIGOT OR "NO-HUB" JOINTS, WITH NEOPRENE GASKETS, GALVANIZED STEEL PIPE WITH CAST IRON DRAINAGE FITTINGS, COPPER DRAINAGE TUBE (DWV) CONFORMING TO ASTM B-306 OR WHERE APPROVED BY LOCAL AUTHORITY, PLASTIC (PVC) SCHEDULE 40 CONFORMING TO ASTM D-2665 OR ABS PIPE.
B. INSTALL ALL FIXTURES AND TRIM AS SHOWN ON DRAWINGS	III. FIXTURES SEE FIXTURE SCHEDULE
II. PLUMBING MATERIALS AND INSTALLATION	NOTE: 1. IGNITION SOURCE SHALL BE LOCATED AS PER OMC 304.3. 2. MAXIMUM LENGTH OF DRYER VENTS SHALL COMPLY WITH OMC 504.8.4.
A. INSTALL THE OWNER FURNISHED FIXTURES SHOWN ON THE PLANS.	
B. CITY WATER AND DOMESTIC HOT WATER - PLASTIC PIPE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL WATER UTILITY REQUIREMENTS. INSULATE ALL ABOVE GRADE HOT AND COLD WATER PIPING WITH ONE-HALF (1/2") INCH THICK MOLDED FIBERGLASS HAVING TYPE ASJ JACKET AND MANUFACTURED BY OWENS-CORNING FIBERGLASS COMPANY.	
C. CITY WATER (UNDERGROUND) - K COPPER FOR 50' UP TO THE BUILDING. REMAINDER - PLASTIC PIPE	

**NOTE:**  
DRYER EXHAUST LENGTH IS TO BE DETERMINED BY THE MANUFACTURER'S SPECIFICATIONS, BUT IS NOT TO EXCEED THE MAXIMUM LENGTH AS DETERMINED BY RCO SECTION 1502.4.5 AND TABLE 1502.4.5.1

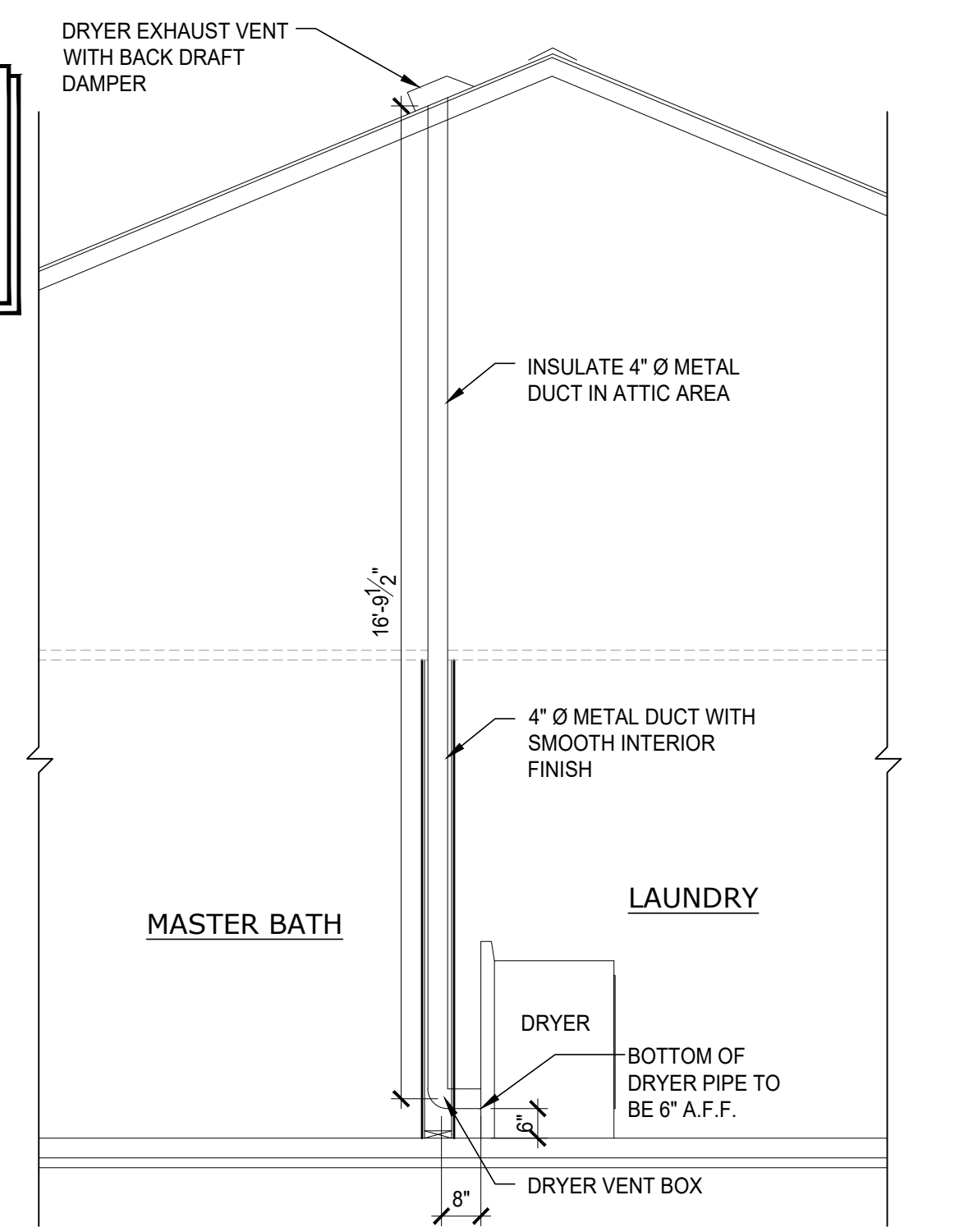
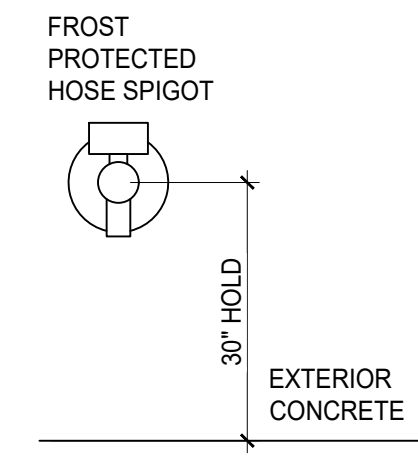
**NOTE:**  
NO PLUMBING OR HVAC EQUIPMENT IS TO BE INSTALLED WITHIN FIRE RATED WALLS.

**NOTE:**  
PLUMBING CONTRACTOR TO FOLLOW AND COMPLY WITH ALL OSHA TRENCHING AND EXCAVATION SAFETY REGULATIONS

**NOTE:**  
TOTAL DRYER EXHAUST LENGTH ALLOWED (PER RCO 1502.4.5) IS 35'-0"  
TOTAL DRYER EXHAUST DUCT LENGTH PROVIDED:  
8' + 5'-0" (90° ELBOW) + 16'-9 1/2" = 22'-5 1/2"

**NOTE:**  
INSTALL AN AUXILIARY CONDENSATE AND SECONDARY DRAIN SYSTEM PER RCO 1411.3.1 OR A WATER-LEVEL MONITORING DEVICE PER RCO 1411.3.1.1

**NOTE:**  
DO NOT INSTALL ANY VENTS OR PROVIDE ANY ROOF PENETRATIONS WITHIN FIRE RATED SHEATHING AREA 4'-0" EACH SIDE OF (2) HOUR FIRE RATED WALL ASSEMBLIES



**2 MOUNTING DETAIL**  
SCALE: 3/8" = 1'-0"

**1 DRYER EXHAUST SECTION**  
SCALE: 3/8" = 1'-0"

PLUMBING LEGEND	
ABBREVIATION	DESCRIPTION
	BACKFLOW PREVENTER
	CHECK VALVE
	SHUT OFF VALVE
	UNION
	CLEANOUT AT FLOOR
	FLOOR DRAIN
	BRANCH PIPING OFF BOTTOM
	BRANCH PIPING OFF TOP
	PIPE DROP
	PIPE RISE
	HOSE BIB
	CONDENSATE DRAIN PIPING
	COLD WATER PIPING
	GAS PIPING
	HOT WATER PIPING
	SANITARY SEWER
	SANITARY SEWER BELOW
	VENT PIPING
	BACKFLOW PREVENTER
	BATHTUB
	CLEANOUT
	DOMESTIC WATER HEATER
	ELECTRICAL CONTRACTOR
	ELEVATION
	FURNACE
	FLOOR DRAIN WITH TRAP PRIMER
	INVERT
	LAVATORY
	LAUNDRY BOX
	MECHANICAL CONTRACTOR
	PLUMBING CONTRACTOR
	REDUCED PRESSURE BACKFLOW PREVENTER
	SINK
	VENT THRU ROOF
	WATER CLOSET

HVAC SPECIFICATIONS	
I. SCOPE OF WORK	A. INSTALL ALL HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS AS SHOWN ON THE DRAWINGS INCLUDING CONTROLS AND CONTROL WIRING.
II. INSULATION	A. REFRIGERANT SUCTION LINES TO BE INSULATED WITH 3/8" THICK ARMSTRONG AP ARMAFLEX INSULATION. B. PIPE INSULATION INSTALLED OUTSIDE TO BE PROTECTED PER MANUFACTURER'S INSTRUCTIONS. C. DUCTWORK 1. DUCTWORK THROUGH UNCONDITIONED SPACES SHALL BE R-8 FLEX DUCT.
III. HVAC MATERIALS AND INSTALLATION	A. PROVIDE PVC PLASTIC TRAPPED CONDENSATE DRAIN FROM COOLING COIL DRAIN PANS TO FLOOR DRAIN. B. REFRIGERANT PIPING SHALL BE TYPE "ACR" COPPER. JOINTS TO BE BRAZED WITH HIGH TEMPERATURE SOLDER. C. FURNISH AND INSTALL DUCTWORK SPECIFIED AND SHOWN ON THE PLAN. D. THE CONTRACTOR SHALL REPLACE ALL THROWAWAY OR CLEAN ALL PERMANENT FILTERS AT THE COMPLETION OF AND PRIOR TO ACCEPTANCE OF THE WORK.
IV. TEMPERATURE CONTROLS	A. ALL CONTROLS AND ELECTRICAL INTERLOCKS AS DESCRIBED BELOW ARE TO BE INCLUDED IN THE MECHANICAL CONTRACT: 1. FURNACE/CONDENSING UNIT - A PROGRAMMABLE HEATING/COOLING THERMOSTAT SHALL CYCLE GAS VALVE OR THE CONDENSING UNIT TO MAINTAIN SPACE TEMPERATURE. WIRE IN ACCORDANCE WITH MANUFACTURER'S WIRING DIAGRAMS.

HVAC FIXTURE SCHEDULE		
MARK	FIXTURE	MANUFACTURER & MODEL NUMBER
FURN	FURNACE	CARRIER 96% AFUE 40,000 BTU FURNACE. MODEL: COMFORT SERIES: 59SC5B040E17"12 - FORESTWOOD, MEADOWOOD, WILLOWOOD, BREEZEWOOD, HAYDENWOOD. CARRIER 96% AFUE 60,000 BTU FURNACE. MODEL: COMFORT SERIES: 59SC5B060E17"14 - CAPEWOOD HAYDENWOOD SUNROOM, BREEZEWOOD SUNROOM
CU	AIR CONDITIONER	CARRIER 14 SEER R-410A 1 1/2 TON AIR CONDITIONER - FORESTWOOD, MEADOWOOD, WILLOWOOD, BREEZEWOOD, HAYDENWOOD. CARRIER 14 SEER R-410A 2 TON AIR CONDITIONER - CAPEWOOD, HAYDENWOOD SUNROOM, BREEZEWOOD SUNROOM.
EF/LIGHT	EXHAUST FAN / LIGHT COMBO	PANASONIC WHISPERGREEN SELECT FAN/LIGHT COMBO: FV-08VRE2 80 CFM 1.0 SONES - ENERGY STAR RATED (OR EQUAL)
EF-1	EXHAUST FAN	PANASONIC FV-05-11VKS1 WHISPERGREEN SELECT FAN ONLY, VARIABLE SPEED 50, 80, 110 CFM ENERGY STAR (OR EQUAL)

LEASING OFFICE HVAC FIXTURE SCHEDULE		
MARK	FIXTURE	MANUFACTURER & MODEL NUMBER
FURN	FURNACE	CARRIER 96% AFUE 40,000 BTU FURNACE. MODEL: COMFORT SERIES: 59SC5B040E17"12. PROVIDE FILTER BOX AND O/A INLET WITH MANUAL DAMPER AND OUTSIDE AIR LOUVER WITH INSECT SCREEN. COLOR TO BE NEAREST STANDARD COLOR TO ADJACENT EXTERIOR FINISH.
CU	AIR CONDITIONER	CARRIER 14 SEER R-410A 1 1/2 TON AIR CONDITIONER
EF-1	EXHAUST FAN	PANASONIC FV-05-11VKS1 WHISPERGREEN SELECT FAN ONLY, VARIABLE SPEED 50, 80, 110 CFM ENERGY STAR (OR EQUAL)

PLUMBING NOTES	
1.	ALL PLUMBING MATERIALS AND METHODS SHALL COMPLY WITH THE LATEST EDITION OF THE OHIO PLUMBING CODE, REFERENCED CODES AND STANDARDS.
2.	ALL FIXTURES SHALL BE SECURELY BOLTED TO THE WALLS AND FLOOR IN ACCORDANCE WITH MANUFACTURER'S ROUGH-IN AND SETTING REQUIREMENTS.
3.	COORDINATE WATER AND SANITARY SERVICES WITH THE LOCAL UTILITY COMPANIES.
4.	PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL INVERTS PRIOR TO START OF WORK.
5.	ALL NON-VENTED FLOOR DRAINS TO BE WITHIN 10'-0" OF MAIN VENTED WASTE LINE.
6.	ALL SANITARY WASTE AND VENT PIPE SHALL BE PVC SCHEDULE 40 ASTM D2665-82 ABOVE GRADE AND SCH. 40 ASTM D-1785-83 BELOW GRADE
7.	PROVIDE VACUUM BREAKERS ON ALL SERVICE SINKS AND WATER HYDRANTS.
8.	PLUMBING SHOWN IS DIAGRAMMATIC IN NATURE AND MAY BE ROUTED DIFFERENTLY BY THE PLUMBING CONTRACTOR DUE TO EXISTING FIELD CONDITIONS PROVIDING LOCATIONS OF ALL FIXTURES REMAIN AND ALLOWED WORK COMPLIES WITH THE OHIO PLUMBING CODE
9.	ALL WASTE PIPE TO HAVE MINIMUM SLOPE OF 1.04%
10.	CONTRACTOR SHALL SIZE ALL SUPPLY LINES IN ACCORDANCE WITH FIXTURE DEMAND. MINIMUM SINGLE FIXTURE SUPPLY SHALL BE 1/2" LINE. MINIMUM DOUBLE FIXTURE SUPPLY LINE SHALL BE 3/4" LINE.
11.	CONTRACTOR SHALL PROVIDE SHUT OFF VALVES FOR EACH FIXTURE.
12.	CUTTING AND PATCHING FOR PLUMBING WORK SHALL BE BY THE PLUMBING CONTRACTOR UNLESS REASSIGNED BY THE GENERAL CONTRACTOR.
13.	INSTALL OWNER FURNISHED FIXTURES SHOWN ON THE PLANS AND SPECIFIED IN THE FIXTURE LIST. ALL METAL TRIM ON FIXTURES AND EXPOSED PIPING AT THE FIXTURES SHALL BE CHROMIUM PLATED, COMPLETE WITH CHROMIUM PLATED ESCUTCHEONS.
14.	AFTER FIXTURES HAVE BEEN SET, THEY SHALL BE CAREFULLY PROTECTED UNTIL THE BUILDING HAS BEEN ACCEPTED. ANY DAMAGE OR DEFECTS DEVELOPING BEFORE ACCEPTANCE SHALL BE REPAIRED AT THE PLUMBING CONTRACTOR'S EXPENSE.
15.	COORDINATE ALL WORK WITH OTHER TRADES.
16.	PROVIDE BLOCKING FOR ALL PLUMBING - ROUGH-IN AS REQUIRED
17.	PROVIDE PLASTIC ISOLATION SEPARATORS FOR ALL COPPER PIPING RUNNING THROUGH STUD WALLS. INSULATE PIPING BETWEEN STUDS.
18.	ALL WALL AND SLAB PENETRATIONS OF MASONRY CONSTRUCTION TO BE SLEEVED.
19.	ALL ROOF DOWNSPOUTS SHALL TIE INTO UNDERGROUND PIPED STORM SEWER SYSTEM.

MECHANICAL NOTES	
1.	THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS.
2.	ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE OHIO MECHANICAL CODE, REFERENCED CODES AND STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS AND GOOD ENGINEERING PRACTICES.
3.	ALL MATERIALS SHALL BE NEW AND OF THE FINEST QUALITY.
4.	ALL WORK SHALL BE INSTALLED BY TRADESMEN THAT ARE TRAINED AND HIGHLY SKILLED IN THE WORK THAT THEY ARE TO PERFORM.
5.	ALL EQUIPMENT, MATERIALS, AND LABOR FURNISHED BY THIS CONTRACTOR SHALL BE WARRANTED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
6.	DUCTWORK SHALL BE HUNG LEVEL AND FREE OF BENDS, CRIMPS, AND SAGS.
7.	DUCTWORK SHALL BE FLEX DUCT AND INSTALLED PER OMC SECTION 603.6. SIZE OF DUCT IS SHOWN ON MECHANICAL PLANS.
8.	ROUND SUPPLY AIR DUCT TAKE OFFS SHALL BE SCREW IN TYPE, TAKE-OFFS SHALL BE EQUIPPED WITH FOAM GASKETS AND LOCKABLE DAMPERS.
9.	CONSTRUCT ALL SUPPLY AIR DUCTWORK IN ACCORDANCE WITH OMC SECTION 603 AND 604 AND SMACNA STANDARDS FOR 2" PRESSURE CATEGORY. CONSTRUCT ALL RETURN AIR DUCTWORK IN ACCORDANCE WITH OMC SECTIONS 603 AND 604 AND SMACNA STANDARDS FOR 1" PRESSURE CATEGORY. ALL DUCT TO BE SEALED TO SEAL CLASS "C". CONSTRUCT ALL EXHAUST AIR DUCTWORK IN ACCORDANCE WITH SMACNA STANDARDS FOR 1" PRESSURE CATEGORY, SEALED TO SEAL CLASS "C".
10.	BALANCE ALL SYSTEMS TO CFM'S AS INDICATED, PROVIDE OWNER WITH REPORT.
11.	ALL CONTROL WIRING TO THERMOSTATS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
12.	PRIOR TO ORDERING ANY ELECTRICAL EQUIPMENT THE HVAC CONTRACTOR SHALL VERIFY THE ELECTRICAL VOLTAGE AND PHASE AVAILABLE WITHIN THE BUILDING.
13.	THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF WORK INCLUDED IN THE PROJECT. DO NOT SCALE THE DRAWING. THE CONTRACTOR SHALL ESTABLISH FINAL DIMENSIONS FROM FIELD MEASUREMENTS PRIOR TO STARTING WORK. THE WORD "PROVIDE" AS USED IN THE PROJECT SHALL BE DEFINED AS "FURNISH AND INSTALL".
14.	THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS FOR POINTS OF CONNECTIONS, CAPACITIES AND ELEVATIONS OF SYSTEMS, IN ALL AREAS AFFECTED BY THE PROJECT, CUT, PATCH, REPAIR AND/OR REPLACE ALL MATERIALS REQUIRED TO INCORPORATE WORK. FINISHES DAMAGED AS A RESULT OF WORK SHALL BE REPAIRED TO MATCH APPROPRIATE ADJACENT FINISHES. FILL VOIDS AROUND DUCTWORK AND TUBING PENETRATING WALLS AND FLOORS WITH FIRE STOPPING MATERIAL (THERMA-FIBER OR EQUAL)
15.	MECHANICAL EQUIPMENT AND PRODUCTS SHALL BE LISTED AND/OR LABELED BY AN APPROVED TESTING OR INSPECTION AGENCY IN ACCORDANCE WITH OMC AND GOVERNING CODE REQUIREMENTS.
16.	MECHANICAL WORK SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS AND ALLOCATE SPACE REQUIREMENTS.

GENERAL NOTES	
AIR FILTER NOTE:	CENTRAL HEATING AND AIR CONDITIONING SHALL BE PROVIDED WITH APPROVED AIR FILTERS, INSTALLED IN THE RETURN AIR SYSTEM, UPSTREAM FROM ANY HEAT EXCHANGER OR COIL.
CLOTHES DRYER EXHAUST NOTES:	CLOTHES DRYERS SHALL BE EXHAUSTED AS PER THE MANUFACTURER'S INSTRUCTIONS. DRYER EXHAUST SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS. CLOTHES DRYER DUCTS SHALL NOT PENETRATE OR BE LOCATED WITHIN ANY FIREBLOCKING OR FIRE-RATED WALLS. EACH VERTICAL RISER SHALL BE PROVIDED WITH A MEANS FOR CLEANOUT. DRYER EXHAUST DUCTS SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING AND SHALL BE EQUIPPED WITH A BACKDRAFT DAMPER. EXHAUST DUCTS SHALL BE CONSTRUCTED OF METAL WITH A SMOOTH INTERIOR FINISH AND SHALL BE A MINIMUM OF 4" IN DIAMETER. DRYER EXHAUST LENGTH NOT TO EXCEED 35'. EACH 90° ELBOW = 5'. EACH 45° ELBOW = 2'-6".

SANITARY LINE SIZING - IPC 709.2		
PIPE SIZE	SLOPE	NUMBER OF UNITS PER BUILDING
4" Ø	1/8" / FOOT	1 UP TO AND INCLUDING 8
6" Ø	1/8" / FOOT	9 AND UP

\*\*NOTE: FOR BUILDINGS WITH SANITARY LINE EXITING AT THE END OF THE BUILDING.

**PIPING INSULATION NOTE**  
MECHANICAL SYSTEM PIPING CARRYING FLUIDS ABOVE 105° OR BELOW 55° SHALL BE INSULATED TO A MINIMUM OF R-3.

MECHANICALLY-VENTILATED O/A SCHEDULE							
ROOM	DESCRIPTION	Az	Pz	Rp	Ra	Ez	CFM (Voz)
-	OFFICE	368	3	5	0.06	0.8	47
-	KITCHEN	114	1	5	0.06	0.8	17
-	STORAGE	677	-	-	0.06	0.8	51
-	PET WASH	57	1	20	0.06	0.8	30

OUTDOOR AIRFLOW CALCULATIONS PER OMC 403.3.1.1 - 403.3.1.3 EQUATIONS 4-1 & 4-2  
Vbz = (Rp)(Pz) + (Ra)(Az)  
Voz = Vbz / Ez = CFM TO BE SUPPLIED  
NOTE: ENTRY, LEASING, STORAGE, PET WASH PROVIDED WITH NATURAL VENTILATION BY USE OF OPERABLE WINDOWS AND/OR DOORS THAT MEET OMC REQUIREMENTS.  
TOTAL: 145 CFM



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MECHANICAL AND PLUMBING NOTES AND SPECS  
PROJECT #: 33521 DATE: JULY 27, 2022  
REDWOOD MIAMISBURG  
MIAMISBURG OH, 45449  
Redwood APARTMENT NEIGHBORHOODS



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**ELECTRICAL SPECS. AND NOTES**  
 PROJECT #: 33521  
 DATE: JULY 27, 2022

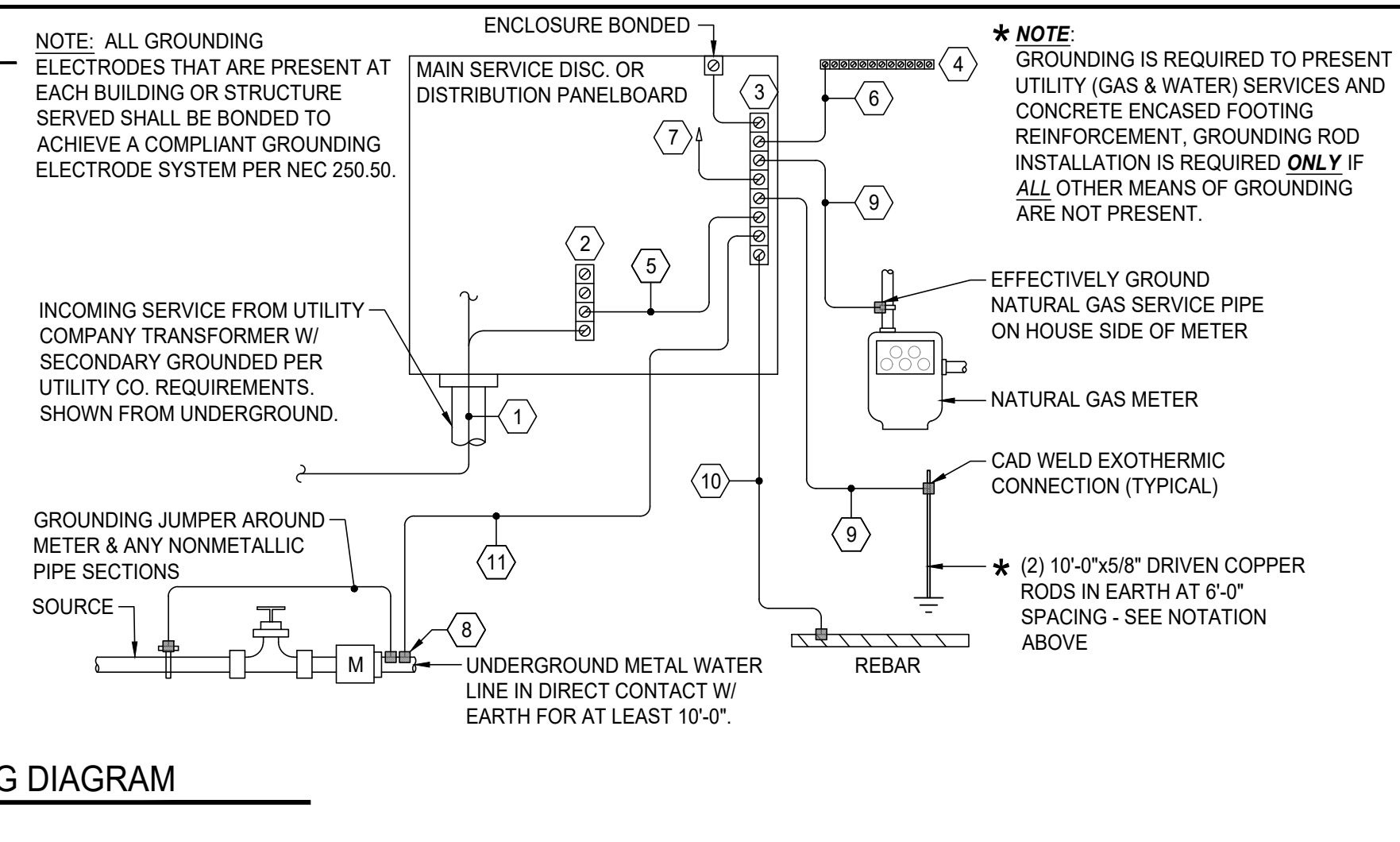
**REDWOOD MIAMISBURG**  
 MIAMISBURG OH, 45449

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 1 OF 8

**GROUNDING DIAGRAM NOTES: (SYMBOL #)**

- SERVICE-ENTRANCE CONDUCTORS WITH GROUNDED NEUTRAL CONDUCTOR.
- NEUTRAL BUS.
- GROUNDING BUS.
- INTERSYSTEM BONDING TERMINATION WITH STAINLESS STEEL MOUNTING HARDWARE AND IMPACT-RESISTANT COVER FOR LOW-VOLTAGE BONDING, PER NEC 250.94.
- MAIN BONDING JUMPER.
- INTERSYSTEM BONDING JUMPER PER NEC 250.94.
- ADDITIONAL GROUNDING CONDUCTORS AS REQUIRED BY NEC ARTICLE 250.
- CONNECTION SHALL BE MADE WITHIN 5'-0" OF WATER ENTRANCE TO BUILDING.
- #6 AWG CU ROD, PIPE, OR PLATE GROUNDING ELECTRODE CONDUCTOR, PER NEC 250.66(A).
- #4 AWG CU CONCRETE-ENCASED GROUNDING ELECTRODE CONDUCTOR, PER NEC 250.66(B).
- GROUNDING ELECTRODE CONDUCTOR PER NEC TABLE 250.66.

**SERVICE GROUNDING ELECTRODE SYSTEM WIRING DIAGRAM**  
 NOT TO SCALE



**GENERAL ELECTRICAL NOTES**

- ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTION REQUIRED AND SHALL ALSO SECURE AND PAY ALL FEES REQUIRED BY THE UTILITY COMPANIES IN CONNECTION WITH THE WORK.
- ALL ELECTRICAL UNDERGROUND WIRING ON THE EXTERIOR OF THE BUILDINGS SHALL BE INSTALLED A MINIMUM OF 2'-6" DEEP, AND IN ACCORDANCE WITH THE GOVERNING JURISDICTION AND REQUIRED STANDARDS.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORTS FOR METERS, ELECTRICAL PANELS AND SUPPORTS AS REQUIRED BY EQUIPMENT. ALL ELECTRICAL FIXTURES SHALL BE SUPPLIED BY THE ELECTRICAL CONTRACTOR.
- NO ELECTRICAL, TELEPHONE, OR OTHER WIRING SHALL RUN IN THE SAME TRENCHES AS PLUMBING LINES, NOR SHALL ANY ATTACHMENTS BE MADE TO PLUMBING LINES, EXCEPT THOSE SET FORTH OR APPROVED BY THE RCO AND THE NATIONAL ELECTRICAL CODE.
- ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE UTILITY COMPANIES FOR FINAL LOCATION OF SERVICES AND SERVICE EQUIPMENT, SHALL PROVIDE ALL REQUIRED TRENCHING, BACKFILLING, AND POWER SUPPLY CIRCUITS AS REQUIRED BY THE UTILITY COMPANIES.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY WITH THE POWER COMPANY THE SIZE OF TRANSFORMERS, POWER FACTOR, DISTANCE FROM TRANSFORMER, CABLE SIZE AND OTHER FACTORS AFFECTING PANELS ON SHORT CIRCUIT CURRENT PROTECTION AND INTERRUPTING RATING. ALL ELECTRICAL EQUIPMENT FURNISHED AND INSTALLED SHALL COMPLY WITH THESE REQUIREMENTS.
- THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL ALL FURNACES, CONDENSING UNITS AND/OR HEAT PUMPS, EXHAUST FANS, AND ALL ASSOCIATED LOW-VOLTAGE WIRING. ALL LINE-VOLTAGE (120V OR GREATER) WIRING, DISCONNECTS, ECT. SHALL BE BY THE ELECTRICAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL PERFORM HIS WORK IN A TIMELY MANNER SO AS NOT TO DELAY OTHER CONTRACTORS AND IN PROCESS CAUSE DAMAGE IN INSTALLING HIS WORK OR HAS TO REMOVE THEIR WORK TO COMPLETE HIS WORK. HE SHALL BE BACKCHARGED FOR REPAIR OR REPLACEMENT OF THEIR WORK.
- THE ELECTRICAL CONTRACTOR SHALL EXCAVATE AND BACKFILL HIS TRENCHES ON THE INTERIOR AND EXTERIOR OF THE BUILDING AND SHALL REMOVE THE DEBRIS AND BACK-CHARGE FOR THE REMOVAL.
- ALL SWITCH PLATES, RECEPTACLE PLATES AND COVER PLATES SHALL BE MOUNTED PLUMB AND TRUE AND TO BE MEDIUM OVERSIZE.
- QUICK WIRE DEVICES ARE NOT ACCEPTABLE.
- C.T. CABINET (IF REQUIRED) MANUFACTURER G.E. WITH "J" SERIES CURRENT TRANSFORMERS.
- LOCATE LIGHT SWITCHES PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- LOCATE THERMOSTATS PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- LOCATE RECEPTACLES PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- E.C. SHALL PROVIDE PORCELAIN INCANDESCENT LAMP HOLDER IN EACH ATTIC SPACE WITH LIGHT SWITCH LOCATED NEAR ATTIC ACCESS HATCH. PROVIDE ONE- 100 WATT A-19 LAMP AT EACH FIXTURE.

**FAULT CURRENT NOTE**

THE ELECTRICAL CONTRACTOR IS TO OBTAIN THE MAXIMUM AVAILABLE UTILITY SHORT CIRCUIT CURRENT. THIS INFORMATION SHALL BE LEGIBLY FIELD-MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT, INCLUDING THE DATE THE FAULT CURRENT INFORMATION WAS OBTAINED, AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED (PER NEC ARTICLE 110.24(A)).

**ENERGY STATEMENT CERTIFICATE NOTE**

ELECTRICAL CONTRACTOR TO PROVIDE A PERMANENT ENERGY STATEMENT CERTIFICATE, CERTIFIED BY THE BUILDER OR OWNER, ON OR IN THE UNITS ELECTRICAL PANEL.

**ARC-CIRCUIT-INTERRUPTER PROTECTION**

PER NEC 210.12(A), ALL 120-VOLT, SINGLE PHASE, 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING RECEPTACLES OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN NEC 210.12(A)(1) THROUGH (6).

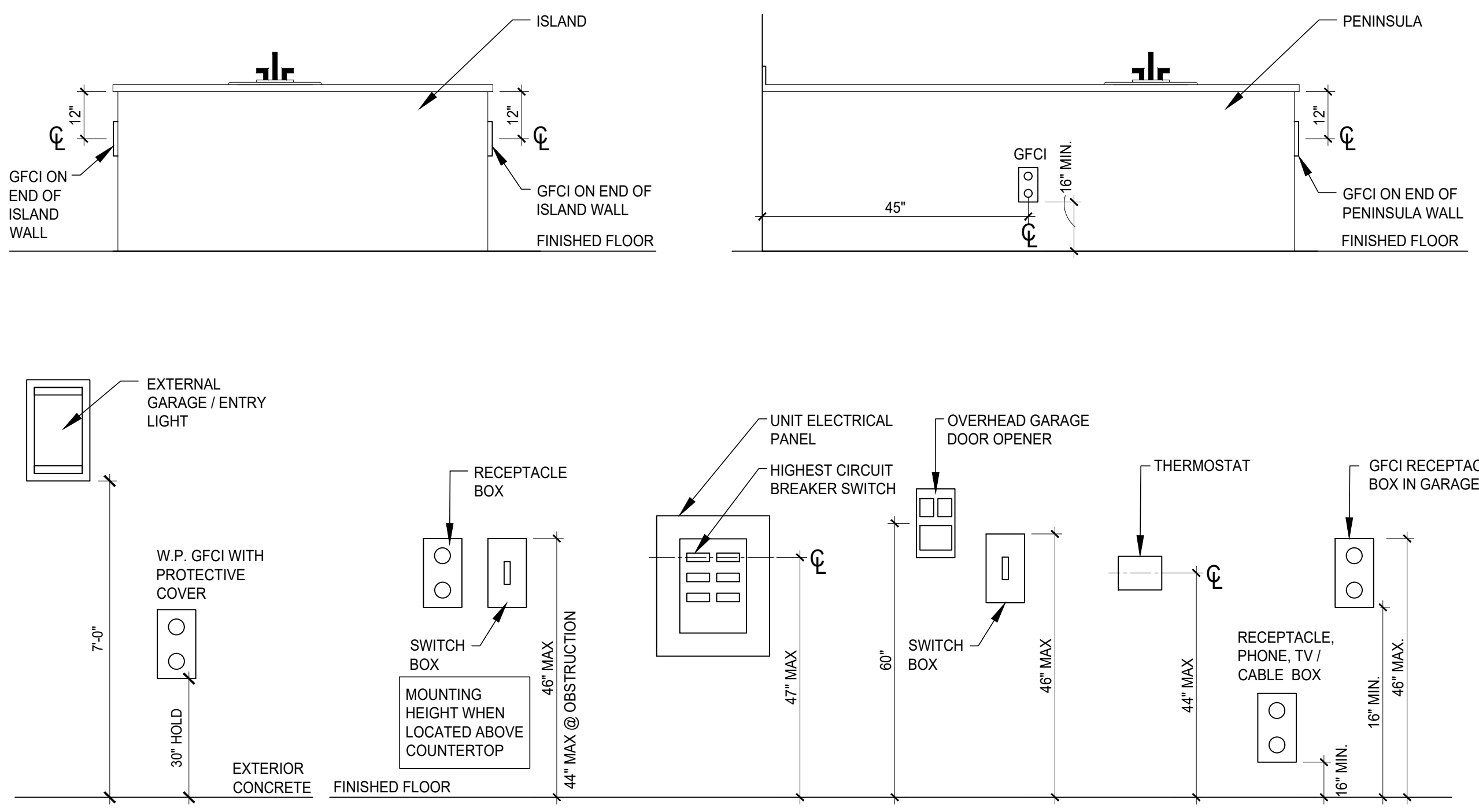
**CONDUCTOR WIRE SIZE TABLE**

OVERCURRENT DEVICE RATING	MINIMUM WIRE SIZES	
	COPPER	ALUMINUM
LIGHT CIRCUITS	#14 AWG, XHHW	
20 AMP BREAKER OR FUSE	#12 AWG, XHHW	
30 AMP BREAKER OR FUSE	#10 AWG, XHHW	
40 AMP BREAKER OR FUSE	#8 AWG, XHHW	
50 AMP BREAKER OR FUSE	#8 AWG, XHHW	
100 AMP DWELLING PANEL	#4 AWG, XHHW	#2 AWG, XHHW
(2) UNIT METER CENTER	3/0 AWG, XHHW	250kcmil, XHHW
(3) UNIT METER CENTER	3/0 AWG, XHHW	250kcmil, XHHW
(4) UNIT METER CENTER	250kcmil, XHHW	400kcmil, XHHW
(5) UNIT METER CENTER	400kcmil, XHHW	(2) 4/0 AWG, XHHW
(6) UNIT METER CENTER	500kcmil, XHHW	(2) 250kcmil, XHHW
(7) UNIT METER CENTER	(2) 4/0 AWG, XHHW	(2) 300kcmil, XHHW
(8) UNIT METER CENTER	(2) 250kcmil, XHHW	(2) 350kcmil, XHHW

**NOTE:** METER CENTER CONDUCTORS ARE SIZED BASED ON TOTAL DEMAND AMPS OF METER CENTER PER NEC 220.84. SEE DEMAND CALCULATIONS, SHEET E1.1. NOT ALL METER CENTER COMBINATIONS MAY BE PRESENT; SEE RISER DIAGRAMS, SHEET 'E1.1'.

**SYMBOL LEGEND: (SEE MOUNTING HEIGHTS, DETAIL 1 THIS SHEET)**

- ① JUNCTION BOX
- Ⓕ LIGHT SWITCH, SINGLE POLE, LOCATE PER DETAIL
- Ⓕ 3-WAY LIGHT SWITCH, SINGLE POLE, LOCATE PER DETAIL
- ▭ DISTRIBUTION PANELBOARD, SEE RISER DIAGRAM FOR DETAILS.
- HOME RUN CIRCUIT (CKT)
- CONDUCTORS 3 - #12 AWG CU U.N.O.
- HOT WIRE
- NEUTRAL WIRE
- GROUND WIRE
- U.N.O. UNLESS NOTED OTHERWISE
- E.C. ELECTRICAL CONTRACTOR
- Ⓢ DUPLEX RECEPTACLE, GROUNDING TYPE, 15AMP, 125V, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- Ⓢ COMBINATION DUPLEX RECEPTACLE AND 3.6A 2-PORT USB CHARGER
- Ⓢ QUADPLEX RECEPTACLE, GROUNDING, TYPE, 20 AMP, 125V, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- Ⓢ GFCI GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE, GROUNDING TYPE, 20AMP, 125V, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- Ⓢ WPI/GFCI WEATHER PROOF GROUND FAULT CIRCUIT INTERRUPT DUPLEX RECEPTACLE, GROUNDING TYPE, 20AMP, 125V, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE.
- SAT SATELLITE DISH HOOK-UP
- CABLE HOOK-UP, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE
- PH PHONE JACK, LOCATE PER MOUNTING HEIGHTS DETAIL THIS SHEET, UNLESS NOTED OTHERWISE
- ⊕ LIGHT FIXTURE - CEILING MOUNTED
- ⊕ LIGHT FIXTURE - WALL MOUNTED
- ⊕ SURFACE MOUNTED LED LIGHT FIXTURE. NOTE: O-RING TO BE INSTALLED IN WET / DAMP LOCATIONS.
- ⊕ LIGHT FIXTURE - PENDANT, BOTTOM OF PENDANT FIXTURE TO BE AT 36" ABOVE TOP OF COUNTERTOP.
- PC-1 PC-1 BUTTON CONTROL PHOTOCELL
- Ⓢ IOPHIC SMOKE & FIRE ALARM
- Ⓢ IOPHIC SMOKE & FIRE, CARBON MONOXIDE & NATURAL GAS ALARM
- DATA JACK
- 4'-0" CEILING MOUNTED LED LIGHT FIXTURE
- EMERGENCY LIGHT, LED, WALL-MOUNT
- EMERGENCY EXIT SIGN, LED, WALL/CLG-MOUNT
- COMBINATION LED EMERGENCY LIGHT & EXIT LIGHT, WALL-MOUNT
- WEATHERPROOF EGRESS LIGHT, LED, EXTERIOR WALL-MOUNT
- VANITY LIGHT, WALL MOUNT
- EXHAUST FAN, CEILING MOUNT, FURNISH & VENT BY M.C., E.C. TO WIRE.
- OVERHEAD DOOR OPENER, CEILING MOUNT



**1 MOUNTING HEIGHTS**  
 SCALE: NOT TO SCALE