

Residential Single Family Unit with ADU
7920 43rd Pl,
Phoenix, AZ 85042

Map showing the location of the property at 7920 43RD PL. The property is marked with a red pin and a black silhouette. The map includes labels for PARK RIDGE ESTATES, HANCOCK PARK, E Baseline Rd, and S 46th St. A redacted address is shown next to the pin.

SCOPE OF WORK - 43RD PLACE:

PROPOSED CONSTRUCTION OF A NEW SINGLE-FAMILY RESIDENCE INCLUDING THREE COVERED PARKING SPACES, AND ASSOCIATED MECHANICAL (HVAC), PLUMBING, AND ELECTRICAL WORK.

OWNER/DEVELOPER:	GEMTECH CORPORATION
CIVIL ENGINEER:	
ZONING:	R 1-6 Residential
CONSTRUCTION TYPE:	Residential
BUILDING USE:	SINGLE-FAMILY RESIDENCE

THE CODE OF THE CITY OF PHOENIX, ARIZONA (PHOENIX CITY CODE)

The main body of adopted laws\ordinances of the City, including Zoning Ordinances. Adopts nationally recognized building codes by reference and contains amendments to the adopted building codes, specific to the City of PHOENIX.

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2018 INTERNATIONAL ELECTRICAL CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2017 NATIONAL ELECTRICAL CODE

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GEMTECH CORP.

7920 43rd Pl
Phoenix AZ 85042

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ISSUE DATES

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COVER SHEET	

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PROPOSED CONSTRUCTION OF A NEW SINGLE-FAMILY RESIDENCE INCLUDING
THREE COVERED PARKING SPACES, AND ASSOCIATED MECHANICAL (HVAC), PLUMBING, AND ELECTRICAL WORK.

GRADING PERMIT NO: CHG 25004841

PROPERTY SETBACKS:
SIDES 10'
REAR 20'
FRONT 15'

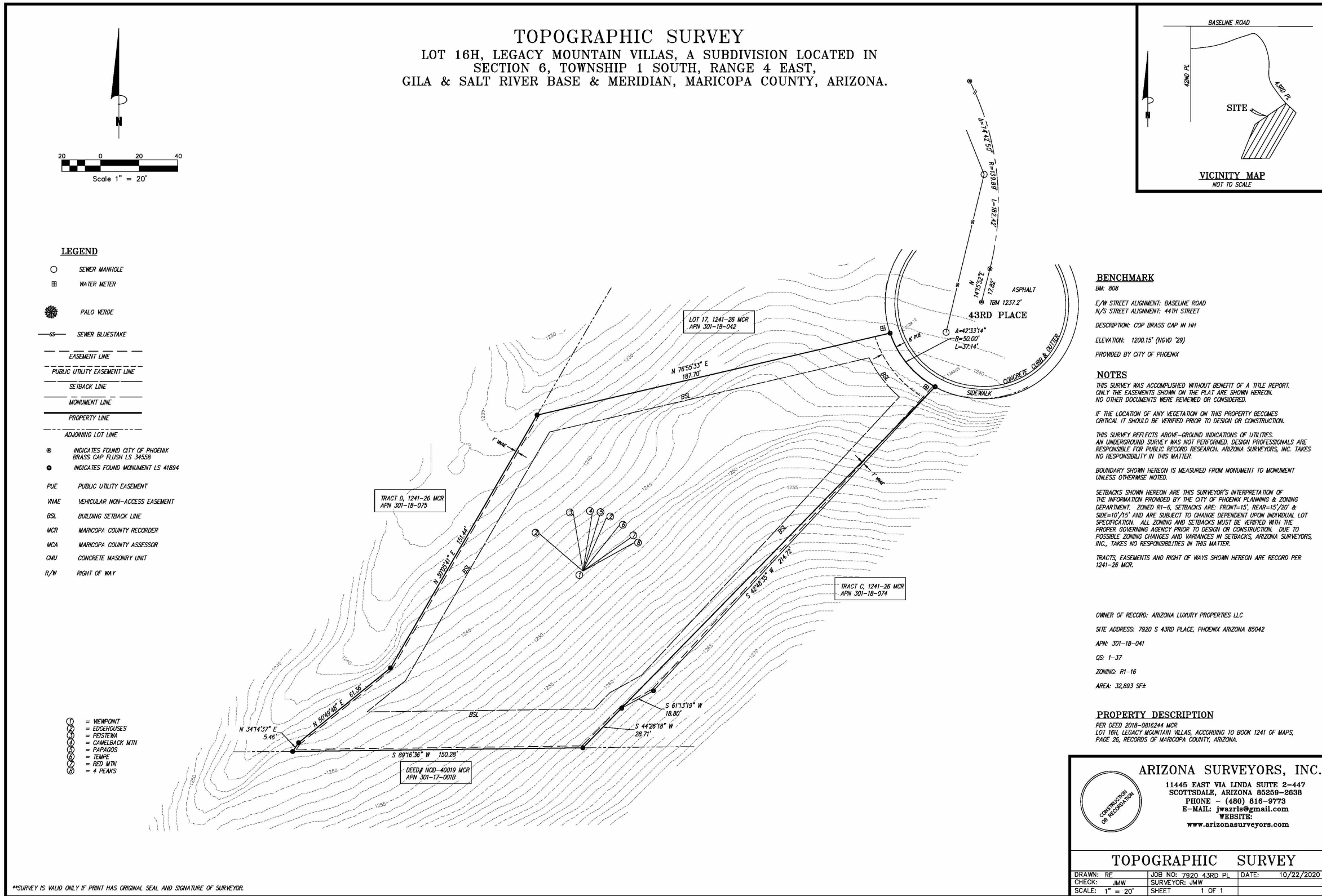
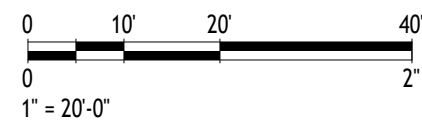
SITE SURVEY TO VERIFY PIN LOCATIONS AND HOME LOCATION PRIOR TO EXCAVATION. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES. ALL FINISH GRADES SHALL BE SMOOTH AND UNIFORM

DRAINAGE & PLUMBING PERMIT NOTE:
Final site drainage layout, stormwater management design, and plumbing system plans will be prepared by a licensed Plumbing Engineer and submitted as separate permit package for review and approval. All drainage design shall comply with the 2018 City of Phoenix Building Construction Code, including adopted 2018 IBC / IRC, 2018 IPC, and local amendments.

1. INSTALL SLIT FENCE PRIOR TO ANY EXCAVATION OR CONSTRUCTION
2. EXCAVATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE PROJECT
3. ALL EXPOSED SOIL SHALL BE MULCHED WITH STRAW OR WOOD CHIPS TO MINIMIZE SOIL EROSION. NO SOIL SHALL BE LEFT IN AN EXPOSED CONDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN A STOCKPILE OF THIS MATERIAL ON SITE FOR QUICK APPLICATION.
4. HYDROSEED WITH A WOOD CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2,000/LB OF MULCH PER 1,000 SQ. YD. OF EXPOSED SOIL. THE MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION IF HIGHER. APPLICATION OF TACKIFIER SHALL BE HEAVIER AT EDGES, IN VALLEYS AND AT CRESTS OF BANKS AND OTHER AREAS WHERE EROSION IS MOST LIKELY TO OCCUR.
5. STRIP MULCHES SHALL OVERFLOW INTO NATURAL UNDISTURBED GROUND. NO SITE DISTURBANCE BELOW MULCHES.
6. GRADING NOTES
1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.
2. ALL FINISH GRADES SHALL BE SMOOTH AND UNIFORM.
3. PROVIDE POSITIVE DRAINAGE TO EXISTING DRAINAGE CHANNELS.
4. FINAL GRADE TO CONVEY SURFACE DRAINAGE TOWARD ROCK ROSTERS AND DISPERSION TREES.
5. AREAS NOT FILLED SHALL BE CLEANED, GRUBBED TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBSTRUCTABLE MATERIAL AND STRIPPED OF TOPSOIL.
6. FINAL SLOPE SHALL WITH A GRADIENT STEEPER THAN 3:1 IN LIFTS NOT TO EXCEED 8 FEET.
7. ALL FILL SHALL BE SURE EACH LIFT IS PROPERLY COMPACTED.
8. LANDSCAPE NOTES
1. OWNER RESPONSIBLE FOR LANDSCAPING - SUCH AS LAWN, TREES, SHRUBS, ETC.
2. IRRIGATION SYSTEM SHALL BE SUBSTED IN WITH VALVE BOX AND IRRIGATION MAIN LINES RUN UNDER CONCRETE. OWNER PROVIDE FINISH FENCE AND LINES 3 OR MORE FEET FROM PROPERTY LINE.
3. OWNER SHALL PROVIDE PUMP & EQUIPMENT

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.
2. ALL FINISH GRADES SHALL BE SMOOTH AND UNIFORM.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING.
4. FINAL GRADE TO CONVEY SURFACE DRAINAGE TOWARD ROCK CHANNELS AND DISPERSION TRENCHES.
5. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL AND STRIPPED OF TOPSOIL.
6. PLACE FILL SLOPES WITH A GRADIENT STEEPER THAN 3:1 IN LIFTS NOT TO EXCEED 8 INCHES, AND MAKE SURE EACH LIFT IS PROPERLY COMPACTED.

1 OWNER RESPONSIBLE FOR LANDSCAPING - SUCH AS LAWN, TREES, SHRUBS, ETC
2 IRRIGATION SYSTEM SHALL BE STUBBED IN WITH VALVE BOX AND IRRIGATION MAIN
LINES RUN UNDER CONCRETE. OWNER SHALL PROVIDE FINISH HEADS AND LINES 3
OWNER SHALL PROVIDE TRAILS AND STEPPING STONES
4 OWNER SHALL PROVIDE POND & EQUIPMENT



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STAMP

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26-03-2026

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SITE PLAN

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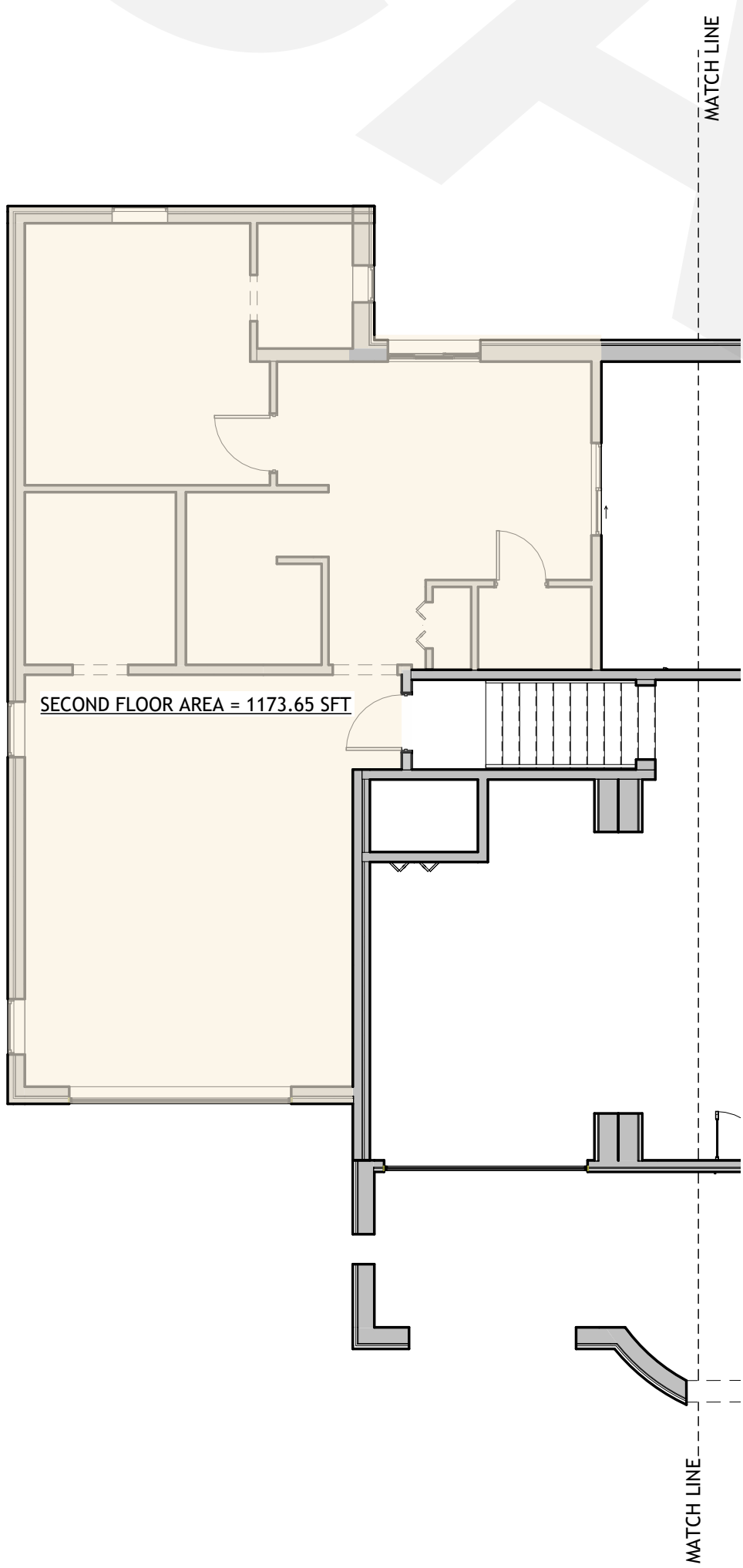
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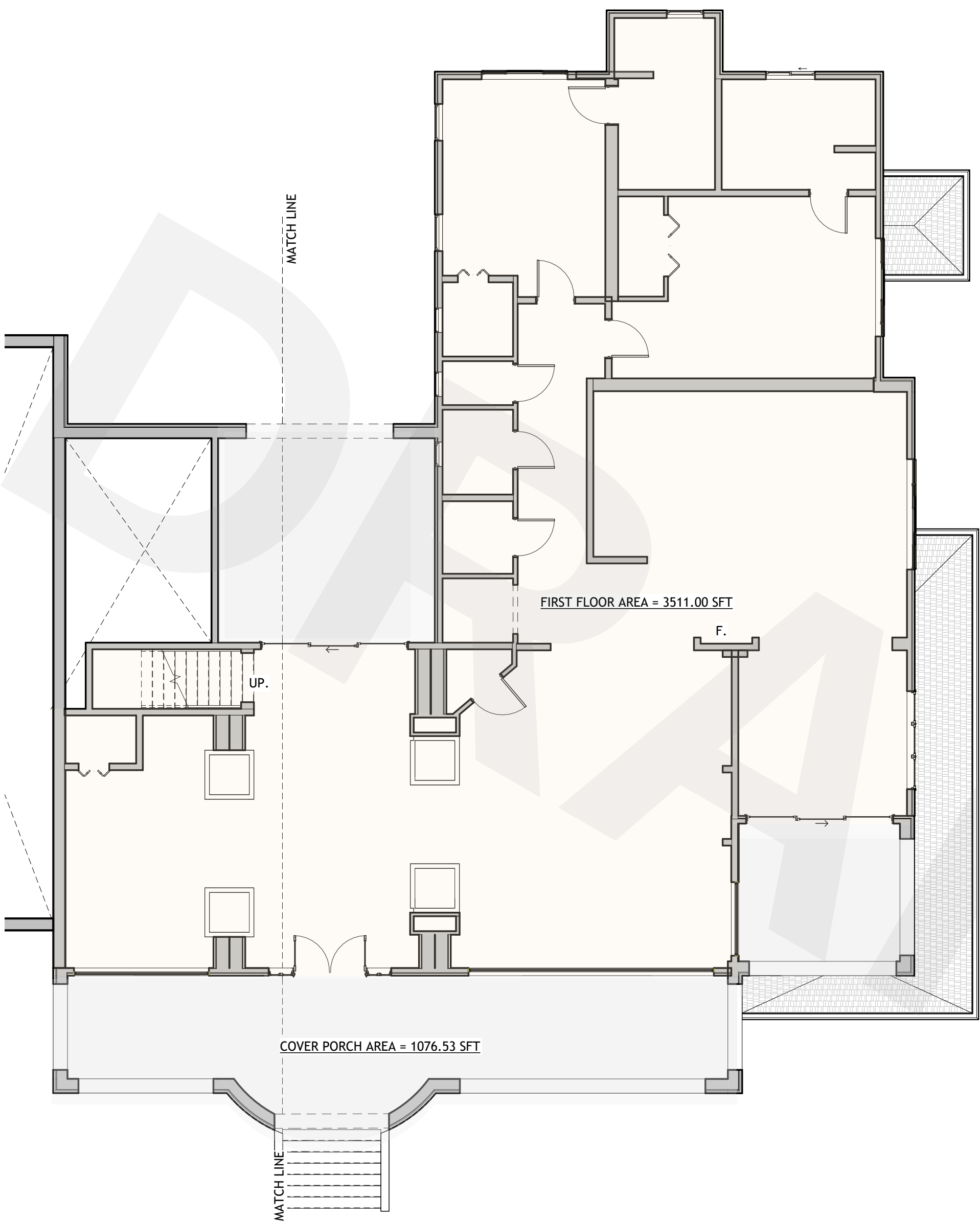
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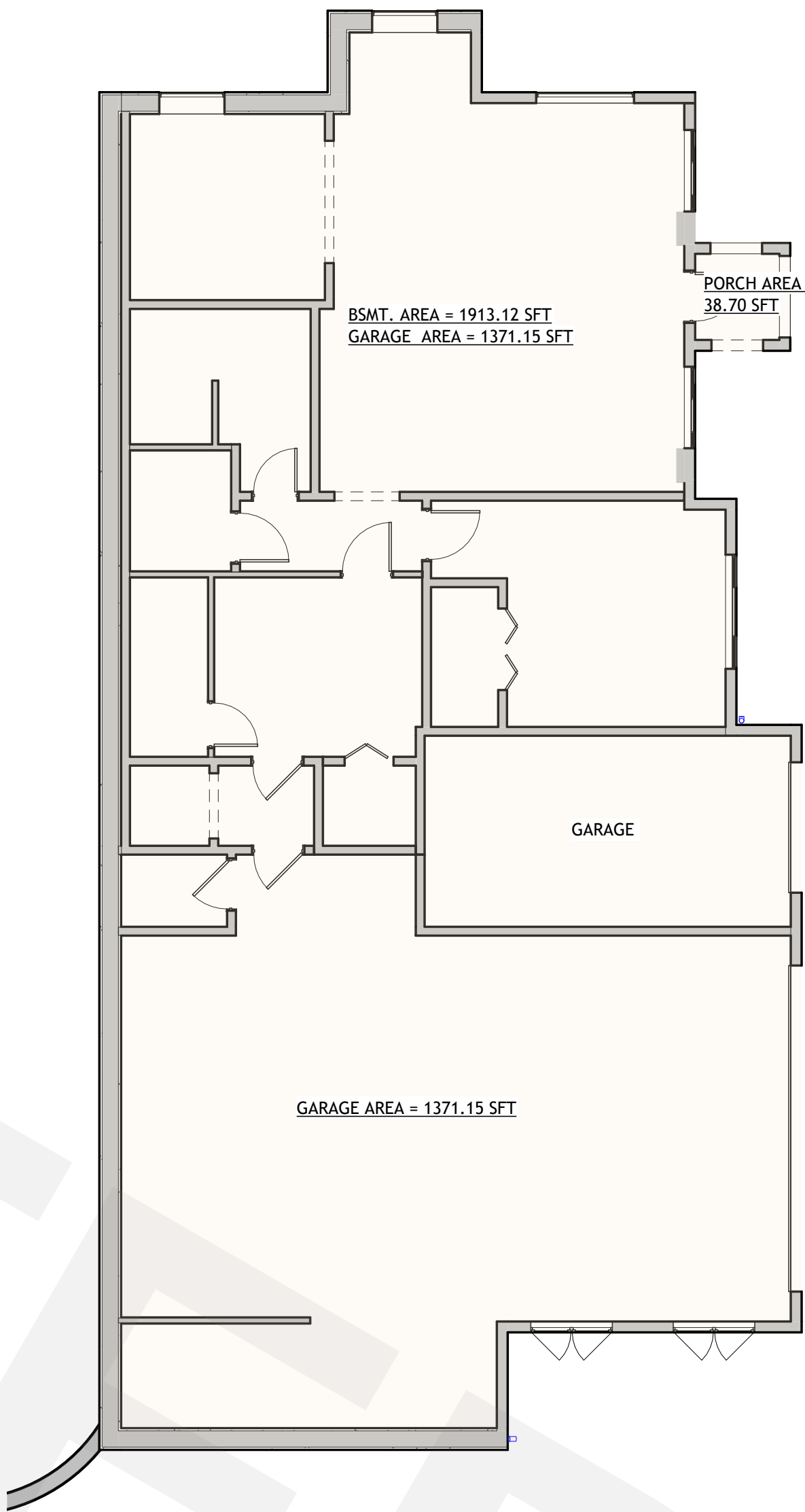
A0.3



2 SECOND FLOOR LEVEL - AREA PLAN
1/8" = 1'-0"



1 FIRST FLOOR LEVEL - AREA PLAN
1/8" = 1'-0"



3 BASEMENT FLOOR LEVEL - AREA PLAN
1/8" = 1'-0"

NOTE: PLAN TO BE REVIEWED AS A SINGLE-FAMILY RESIDENCE.

AREA LEGEND:

SINGLE FAMILY RESIDENCE AREA

WALL LEGEND

W9		INTERIOR PARTITION WALL - FRR 1 HOUR - 2"x6" WOOD STUDS
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NOTE: INTERIOR PARTITION WALL – 1-HOUR FIRE-RESISTANCE RATED (FRR) – 2" X 6" WOOD STUDS. ALL MATERIALS, MEMBRANES, AND ASSEMBLY COMPONENTS SHALL COMPLY WITH APPROVED UL-LISTED OR EQUIVALENT FIRE-RESISTANCE-RATED ASSEMBLIES TESTED IN ACCORDANCE WITH ASTM E119 AND UL 263.

FIRE SEPARATION NOTE:
FIRE-RESISTANCE-RATED WALL AND/OR FLOOR/CEILING ASSEMBLIES
SHALL COMPLY WITH APPROVED UL-LISTED ASSEMBLIES AND THE 2018
IRC WITH CITY OF PHOENIX AMENDMENTS. REFER TO DETAIL 4/A4.1.

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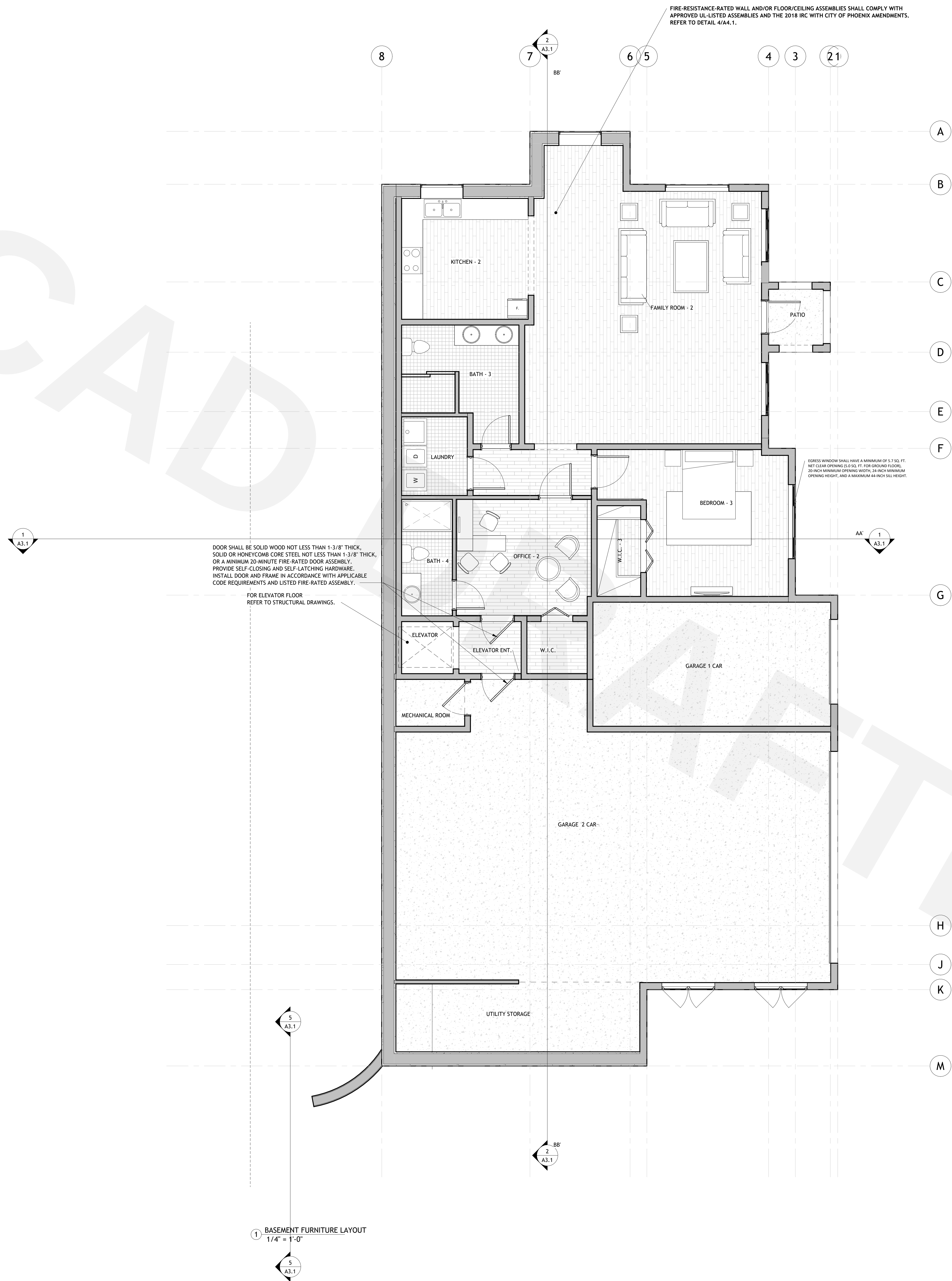
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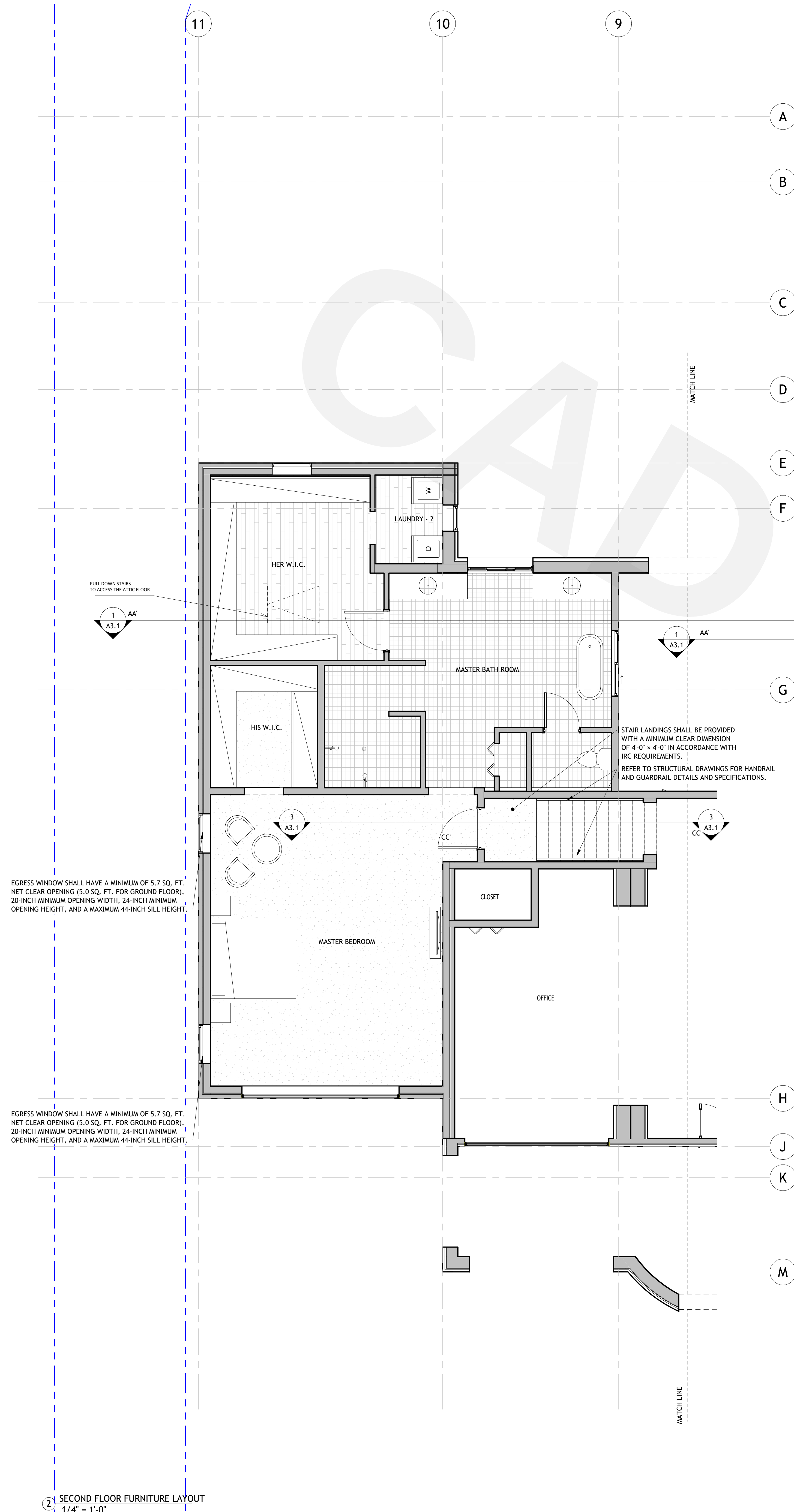
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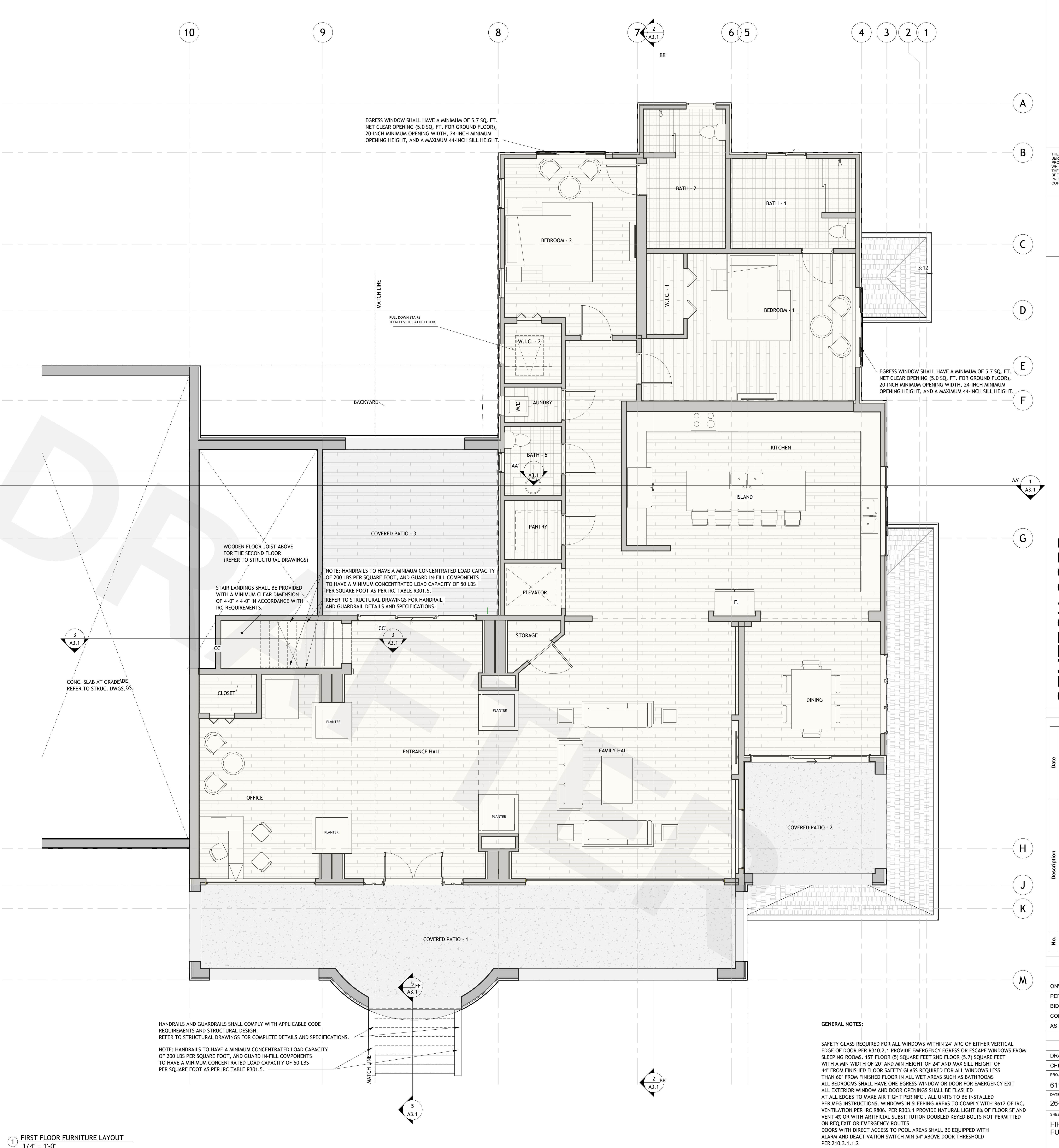
GENERAL NOTES:

SAFETY GLASS REQUIRED FOR ALL WINDOWS WITHIN 24" ARC OF EITHER VERTICAL EDGE OF DOOR PER 130.2.1 PROVIDE EMERGENCY EGRESS OR ESCAPE WINDOWS FROM SLEEPING ROOMS, FIRST FLOOR 15.0 SQUARE FEET AND FLOOR 5.0 SQUARE FEET WITH MINIMUM 20" CLEARANCE ABOVE AND MINIMUM 20" CLEARANCE BELOW AND 44" FROM FINISHED FLOOR SAFETY GLASS REQUIRED FOR ALL WINDOWS LESS THAN 60" FROM FINISHED FLOOR IN ALL WET AREAS SUCH AS BATHROOMS. ALL WINDOWS SHALL HAVE AN EGRESS OR ESCAPE WINDOW WITH AN EMERGENCY EXIT ALL EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE FLASHED AT ALL TIMES TO MAKE AIR TIGHT PER 130.1. ALL UNITS TO BE INSTALLED PER 130.2.1. PROVIDE EXHAUST FAN WITH MINIMUM 10 CFM PER 7617 OF OIL VENTILATION PER IRC 806. PER 130.3.1 PROVIDE NATURAL LIGHT 8" FOR 5.0 SF AND 40" OR WITH ARTIFICIAL SUBSTITUTION DOUBLED EQUIVALENTS NOT PERMITTED ON EXTERIOR WALLS OR ENERGY RATED WALLS PER 130.2.1. PROVIDE EXHAUST FAN WITH 40" WITH DIRECT ACCESS TO POOL AREAS SHALL BE EQUIPPED WITH ALARM AND DEACTIVATION SWITCH MIN 5" ABOVE DOOR THRESHOLD PER 130.2.1.2.

WINDOWS FACING POOL AREA ENCLOSURE SHALL BE EQUIPPED WITH A SCREENED IN PLACE WIRE MESH SCREEN, A KEY LOCK THAT PREVENTS OPERATION OF WINDOW AND SCREEN FROM INSIDE OF ENCLOSURE AND BE 44" MIN 24" FROM FINISHED FLOOR. EMERGENCY ESCAPE OR RESCUE WINDOWS IN BEDROOMS WHICH FACE POOL AREA ENCLOSURE SHALL BE EQUIPPED WITH A KEY LOCK AND BE LOCATED NO LESS THAN 54" FROM FLOOR PER 210.3.4.



2 SECOND FLOOR FURNITURE LAYOUT
1/4" = 1'-0"



1 FIRST FLOOR FURNITURE LAYOUT
1/4" = 1'-0"

HANDRAILS AND GUARDRAILS SHALL COMPLY WITH APPLICABLE CODE REQUIREMENTS AND STRUCTURAL DESIGN.
REFER TO STRUCTURAL DRAWINGS FOR COMPLETE DETAILS AND SPECIFICATIONS.

NOTE: HANDRAILS TO HAVE A MINIMUM CONCENTRATED LOAD CAPACITY OF 200 LBS PER SQUARE FOOT, AND GUARD IN-FILL COMPONENTS TO HAVE A MINIMUM CONCENTRATED LOAD CAPACITY OF 50 LBS PER SQUARE FOOT AS PER IRC TABLE R301.5.

NOTE: HANDRAILS TO HAVE A MINIMUM CONCENTRATED LOAD CAPACITY OF 200 LBS PER SQUARE FOOT, AND GUARD IN-FILL COMPONENTS TO HAVE A MINIMUM CONCENTRATED LOAD CAPACITY OF 50 LBS PER SQUARE FOOT AS PER IRC TABLE R301.5.

GENERAL NOTES:

SAFETY GLASS REQUIRED FOR ALL WINDOWS WITH 24" AFR. OR EITHER VERTICAL EDGE OF DOOR PER R310.2.1 PROVIDE EMERGENCY EGRESS OR ESCAPE WINDOWS FROM SLEEPING ROOMS. 1ST FLOOR 60 SQUARE FEET 2ND FLOOR 15.0 SQUARE FEET. ALL WINDOWS SHALL HAVE A MINIMUM 20" CLEARANCE FROM THE TOP OF THE WINDOW TO 44" FROM FINISHED FLOOR SAFETY GLASS REQUIRED FOR ALL WINDOWS LESS THAN 60" FROM FINISHED FLOOR IN ALL WET AREAS SUCH AS BATHROOMS. ALL GLASS SHALL HAVE AN EGRESS OR ESCAPE LABEL. ALL GLASS SHALL EXIST ALL EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE FLASHED AT ALL DOORS TO KITCHEN R310.3 PER IRC. ALL UNITS TO BE INSTALLED PER R310.3 PER IRC. ALL UNITS SHALL BE INSTALLED PER R310.3 PER IRC. VENTILATION PER IRC R806, PER R303.1 PROVIDE NATURAL LIGHT AND 8" OF R302.5 AND VENT 4" OR WITH ARTIFICIAL SUBSTITUTION DOUBLED KEYS NOT PERMITTED ON EXTERIOR WALLS OR EXTERIOR ROOF. ALL UNITS SHALL BE INSTALLED WITH KEYS WITH DIRECT ACCESS TO POOL AREAS SHALL BE EQUIPPED WITH ALARM AND DEACTIVATION SWITCH MIN 5" ABOVE DOOR THRESHOLD PER R310.2.1

1.1.2 WINDOWS FACING POOL AREA ENCLOSURE SHALL BE EQUIPPED WITH A SCREEN IN PLACE WIRE MESH SCREEN, A KEYED LOCK THAT PREVENTS OPENING OF WINDOW MORE THAN 4" FROM FINISHED FLOOR AND NOT LESS THAN 5" ABOVE FLOOR. EMERGENCY ESCAPE OR RESCUE WINDOWS IN BEDROOMS WHICH FACE POOL ENCLOSURE SHALL BE EQUIPPED WITH A KEYED DEVICE LOCATED NO LESS THAN 54" FROM FLOOR PER R310.2.1.3

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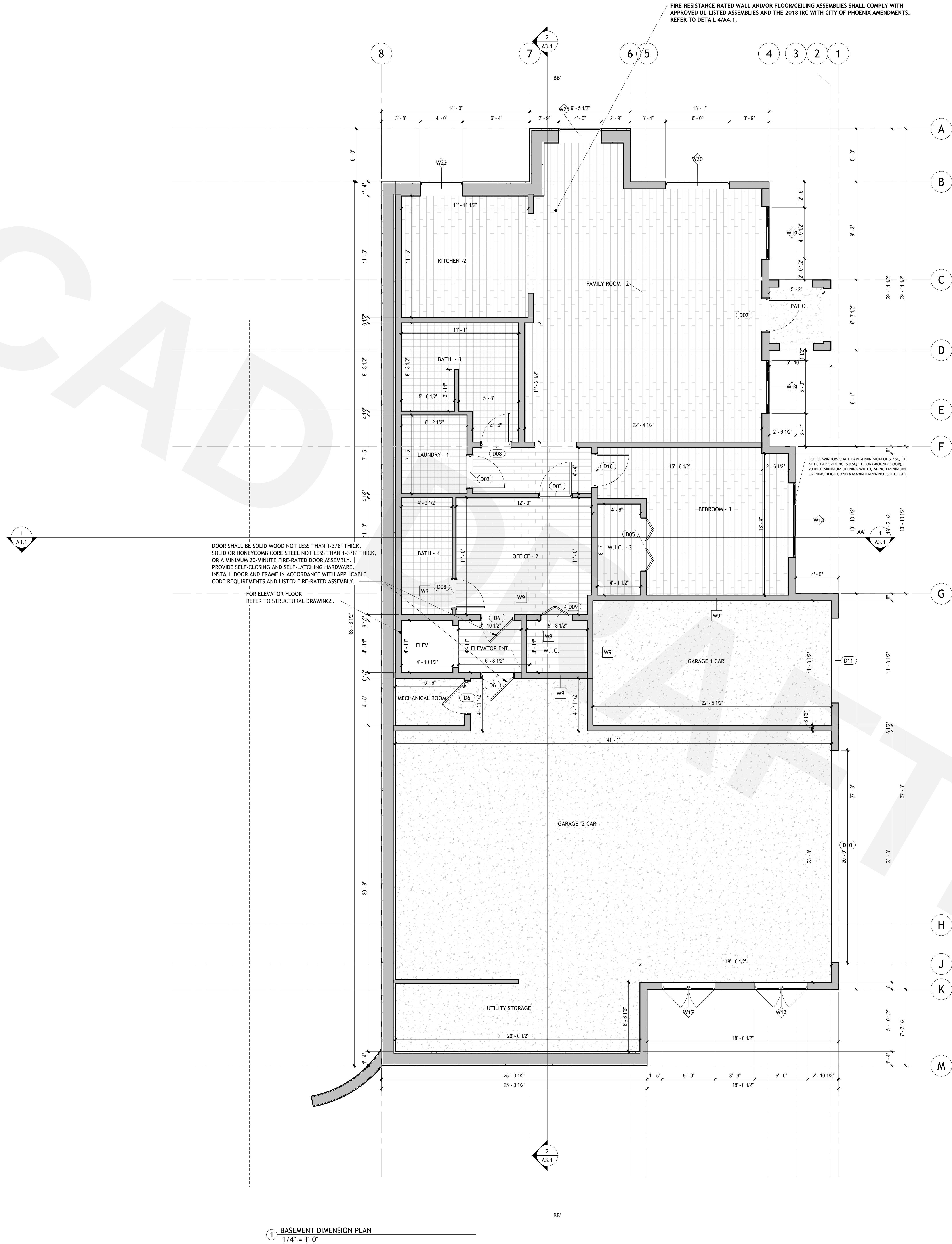
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26-03-2026	
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BASEMENT FLOOR DIMENSION PLAN	

SHEET NUMBER

A1.1.3



1 BASEMENT DIMENSION PLAN
1/4" = 1'-0"

FLOOR FINISHES		
F-01		VINYL PLANKS
F-02		CERAMIC TILES
F-03		CONCRETE FINISH
F-04		CARPET FINISH

FIRE SEPARATION NOTE:
THE FIRE-RESISTANCE-RATED ASSEMBLIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TESTED AND APPROVED UL-LISTED OR EQUIVALENT ASSEMBLIES, TESTED IN ACCORDANCE WITH ASTM E119, UL 263, OR OTHER APPROVED METHODS PER IBC SECTION 703.3.

THE FLOOR/CEILING ASSEMBLY UTILIZING FLOOR TRUSSES, INCLUDING ALL SUPPORTING STRUCTURAL MEMBERS, SHALL PROVIDE A FIRE-RESISTANCE RATING EQUAL TO OR GREATER THAN THE REQUIRED 1-HOUR RATING IN ACCORDANCE WITH IRC SECTION R302.3.1.

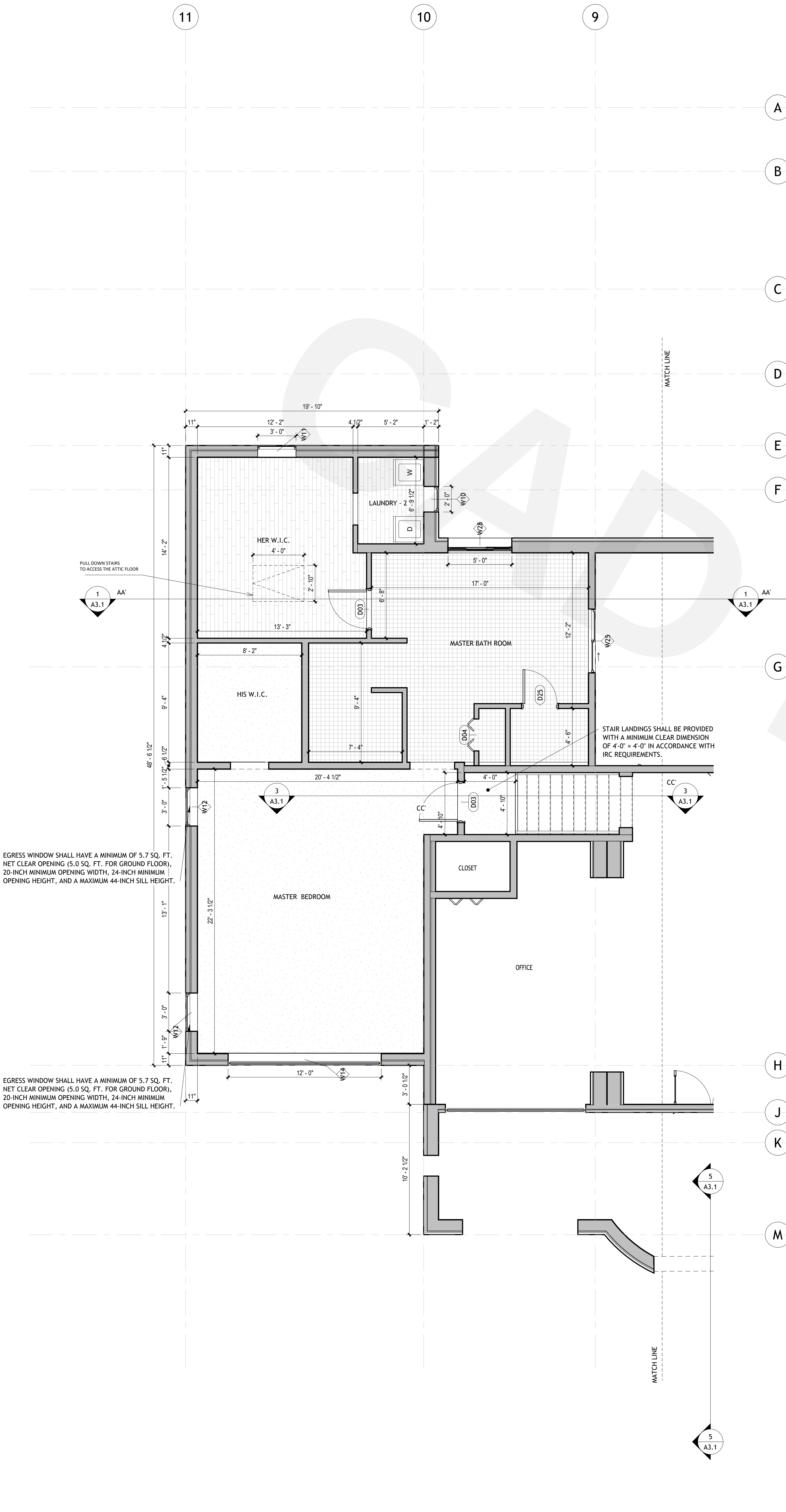
ALL FIRE-RESISTANCE-RATED WALL ASSEMBLIES SHALL EXTEND CONTINUOUSLY FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING AND SHALL BE TIGHT AGAINST EXTERIOR WALL CONSTRUCTION.

ALL PENETRATIONS THROUGH FIRE-RESISTANCE-RATED WALL AND FLOOR/CEILING ASSEMBLIES SHALL BE PROTECTED WITH APPROVED FIRESTOP SYSTEMS IN ACCORDANCE WITH IRC SECTION R302.4, INCLUDING THROUGH PENETRATIONS AND MEMBRANE PENETRATIONS, TO MAINTAIN THE REQUIRED FIRE-RESISTANCE RATING.

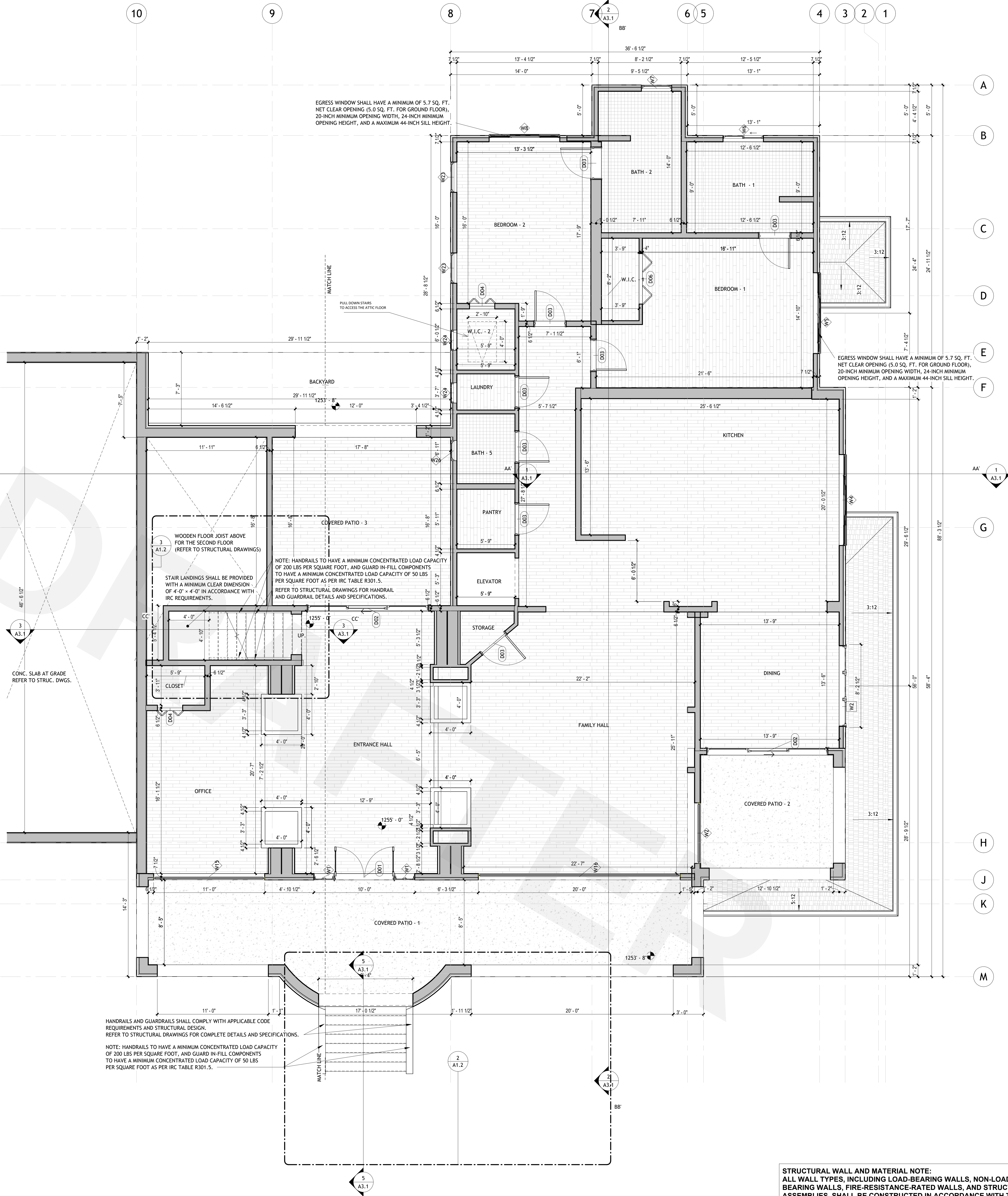
REFER TO STRUCTURAL AND ARCHITECTURAL DETAILS FOR COMPLETE UL-LISTED ASSEMBLY REQUIREMENTS, INCLUDING FLOOR TRUSS FIRE-RATED ASSEMBLIES, SUPPORTING WALL CONSTRUCTION, MEMBRANE PROTECTION, AND PENETRATION FIRESTOPPING. REFER TO DETAIL 5/A4.1 AND ASSOCIATED UL DESIGN NUMBER.

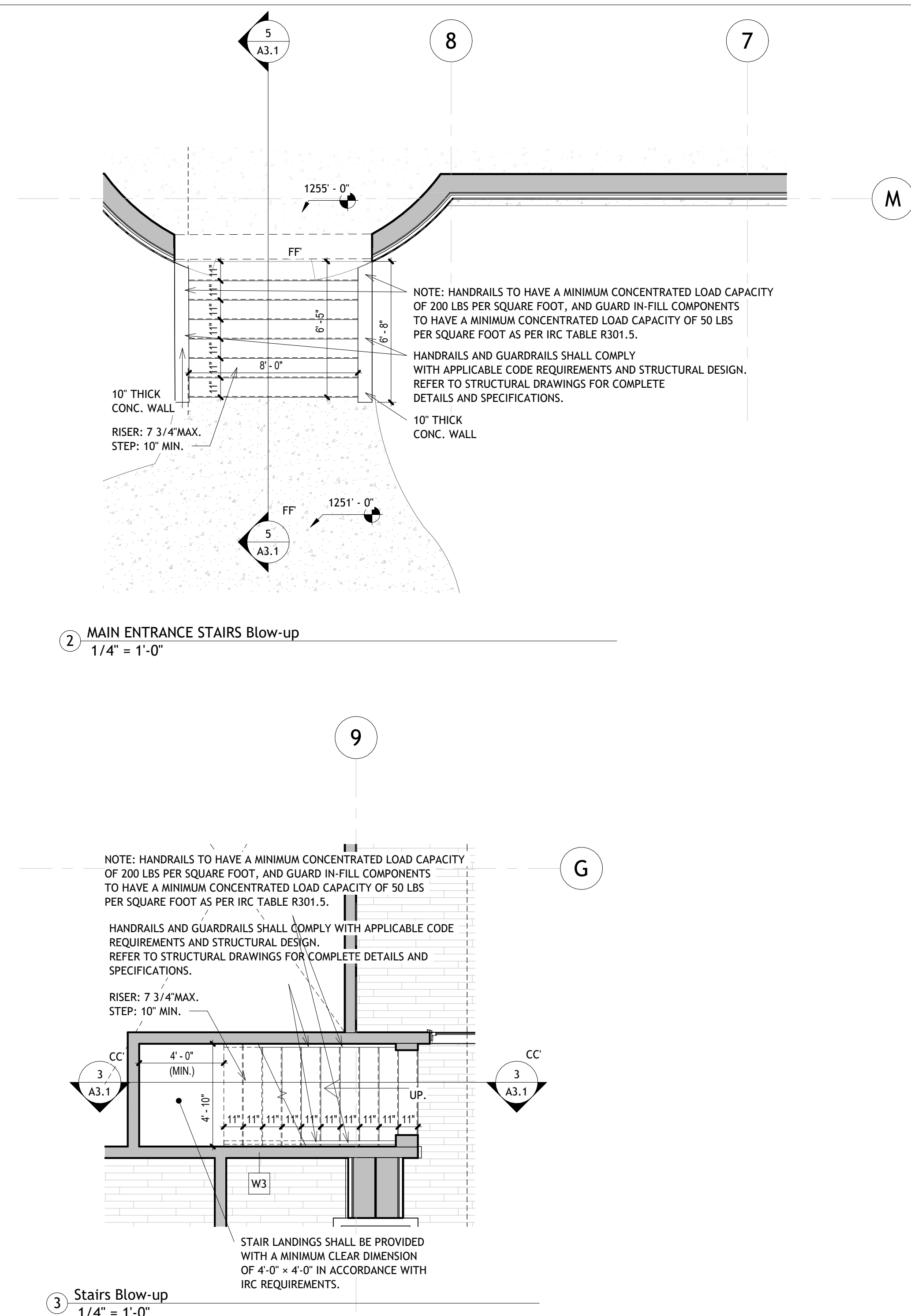
NOTE: ALL WALL TYPES, WALL TAGS, AND STRUCTURAL SPECIFICATIONS SHALL BE GOVERNED BY THE STRUCTURAL DRAWINGS AND STRUCTURAL ENGINEER'S DESIGN. REFER TO THE STRUCTURAL SET FOR COMPLETE WALL STRUCTURAL INFORMATION AND DETAILS.

SAFETY GLAZING NOTE:
ALL GLAZING SUBJECT TO HUMAN IMPACT SHALL BE TEMPERED
SAFETY GLAZING IN ACCORDANCE WITH IRC SECTION R308 AND ARS
36-1631. ALL REQUIRED LOCATIONS HAVE BEEN IDENTIFIED AND
LABELED AS "TEMPERED" ON THE PLANS.



2 SECOND FLOOR DIMENSION PLAN
1/4" = 1'-0"





Zone / Roof ID	Attic area (ft²)	Ratio used (1/150) per IRC R806.2	Total NFA required (sq-ft)	Total NFA required (sq-in)	Intake % of total	Intake NFA (sq-in)	Exhaust NFA (sq-in)	Type	Vent type	Size	NFA per vent (sq-in)	Number of vents
For Soffit Type Vents _ Roof Ventilation												
Attic Roof	5482	0.007	36.5	5262.7	50%	2631.4	2631.4	Soffit Type	Duralfo 641608 Soffit Vent, 16-inch by 8-inch, White	16" X 8"	50 sq.in per Vent	53
For Ridge Type Vents _ Roof Ventilation												
Attic Roof	5482	0.007	36.5	5262.7	50%	2631.4	2631.4	Ridge Type	VENTSURE® 4-FOOT STRIP 12" Vent with Weather PROTECTOR®	12" x 4' Strip	20 sq.in per Linear Foot	20

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51 AMP

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7920 43rd Pl
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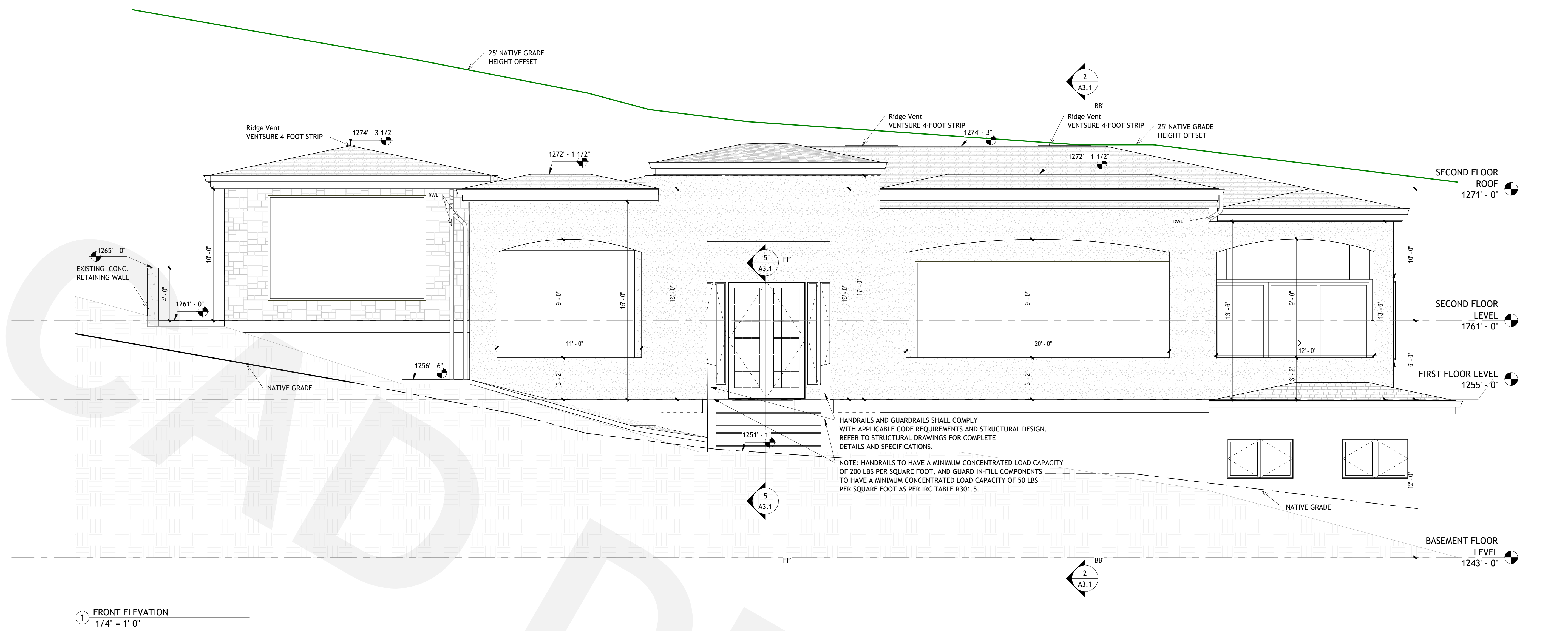
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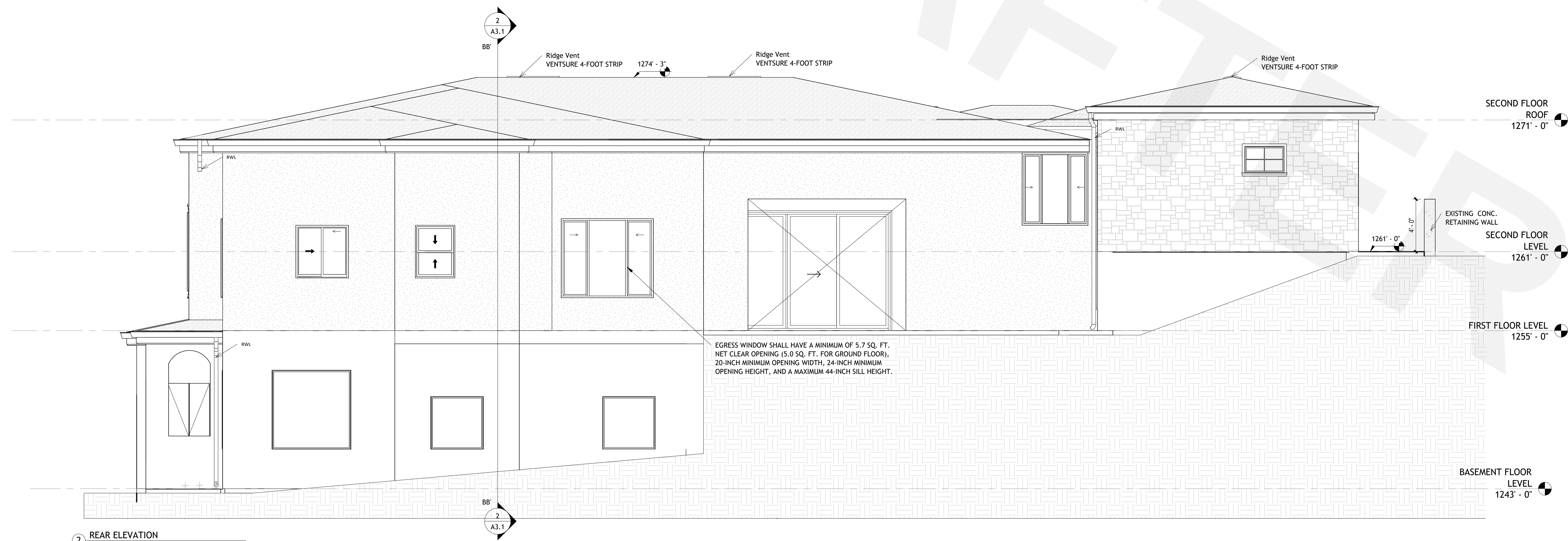
FRONT AND REAR ELEVATION

ET NUMBER.

2.1



1 FRONT ELEVATION
1/4" = 1'-0"



2 REAR ELEVATION
1/4" = 1'-0"

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MAN / 10

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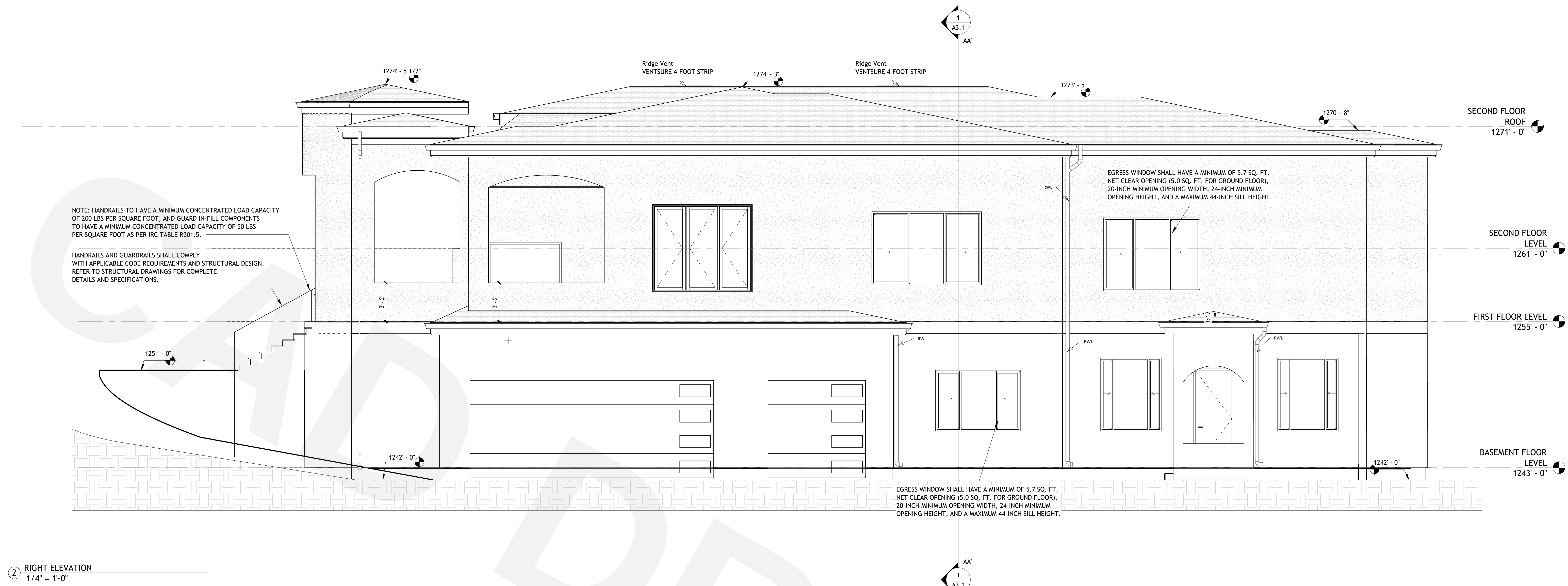
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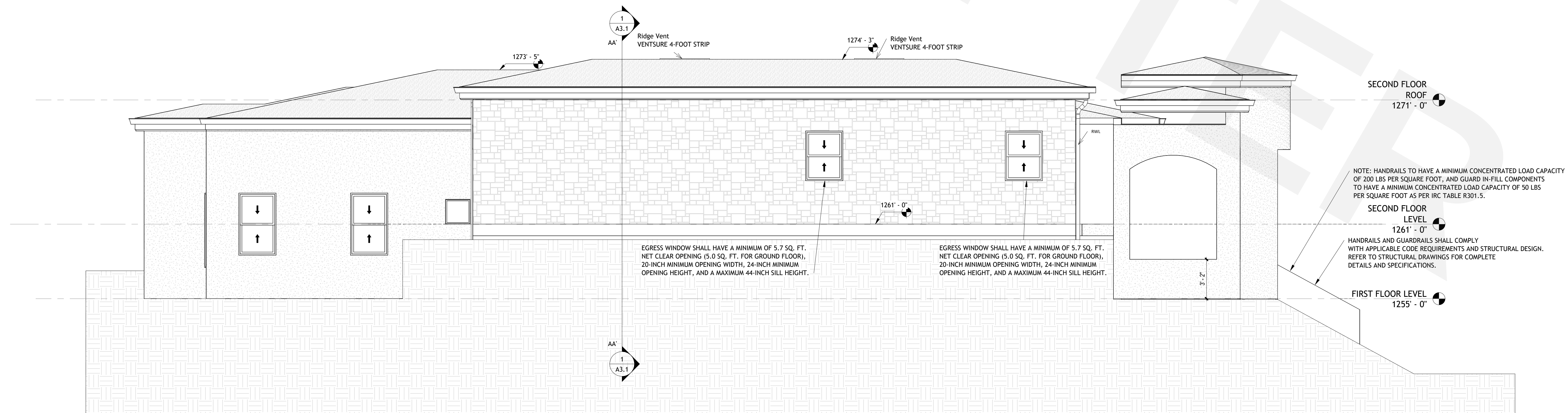
RIGHT AND LEFT ELEVATION

HEET NUMBER

A2.2



② RIGHT ELEVATION
 $1/4" = 1'-0"$

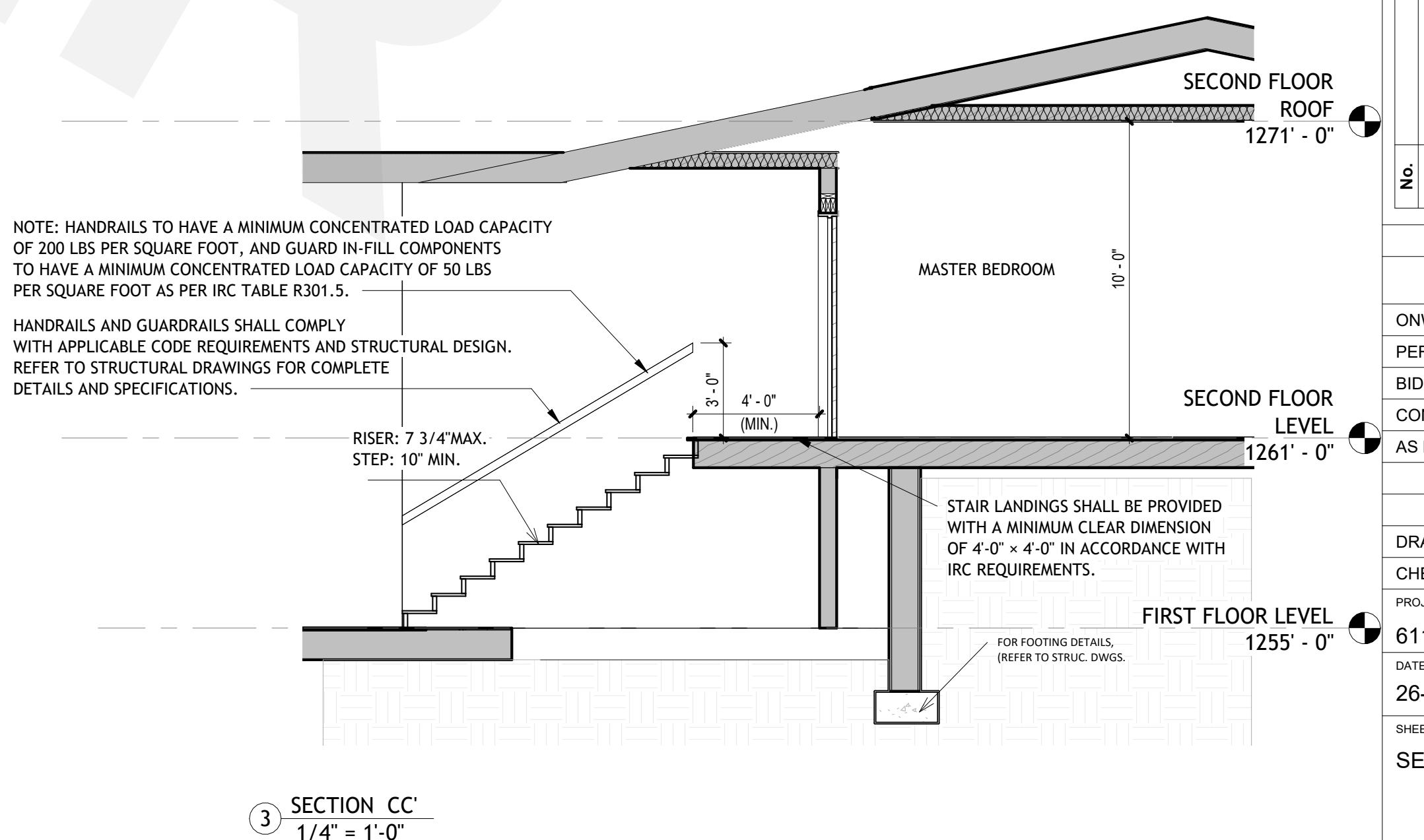
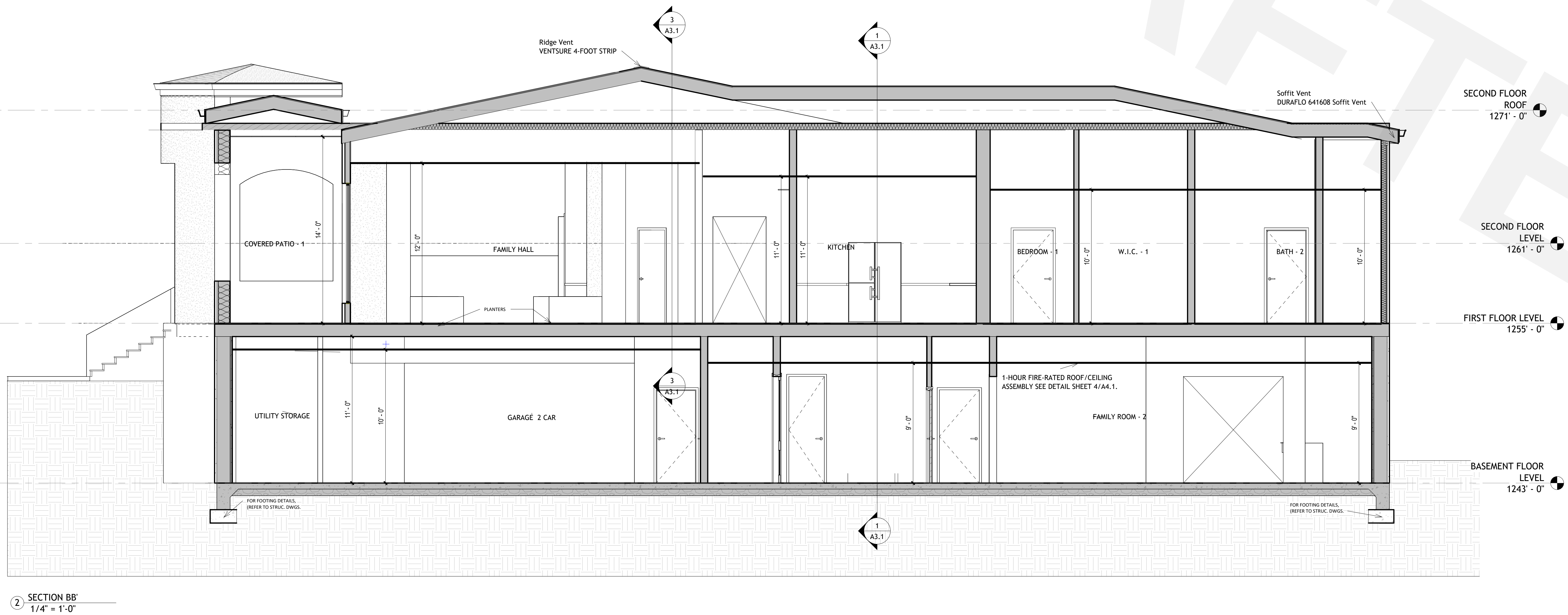
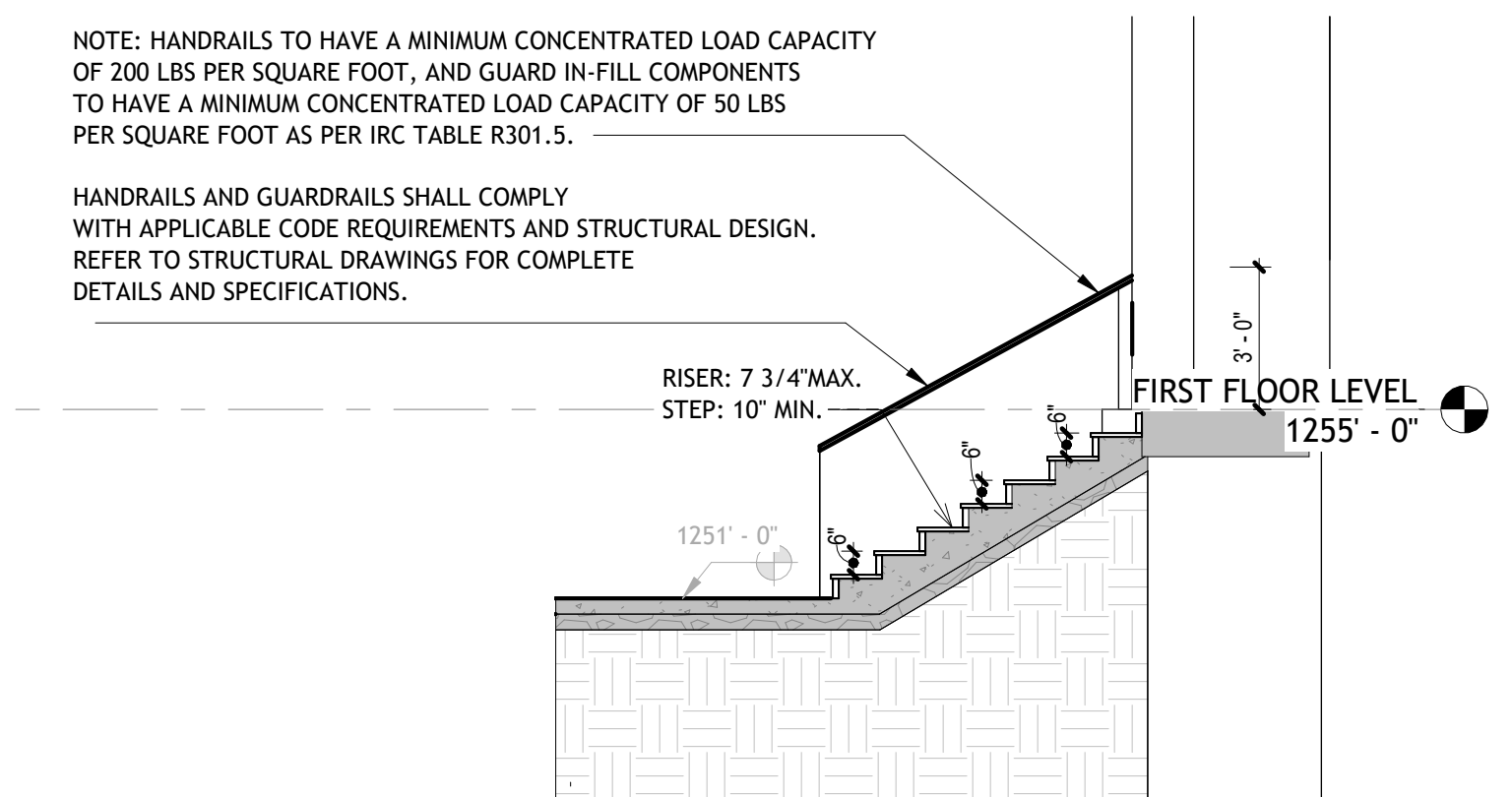
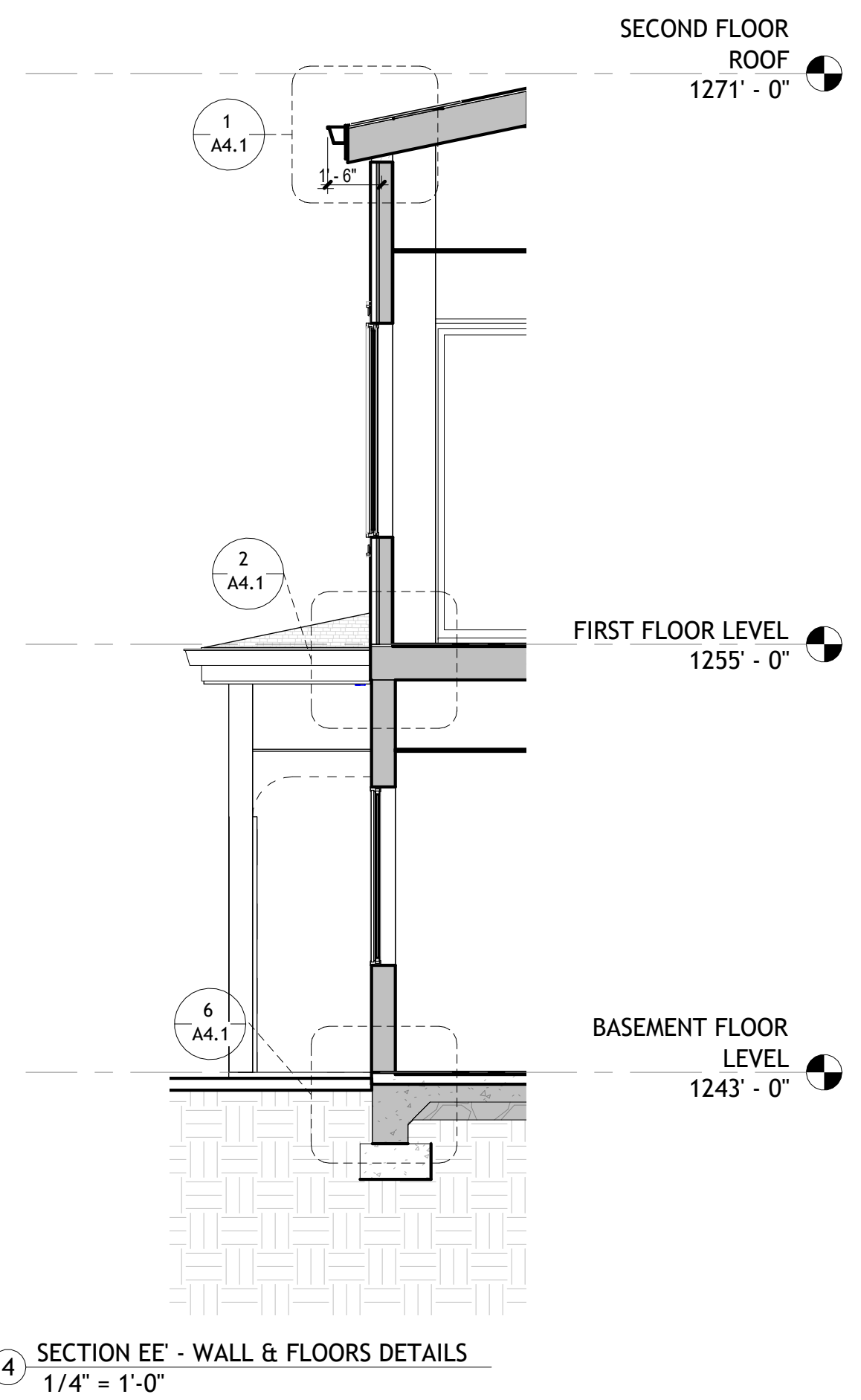
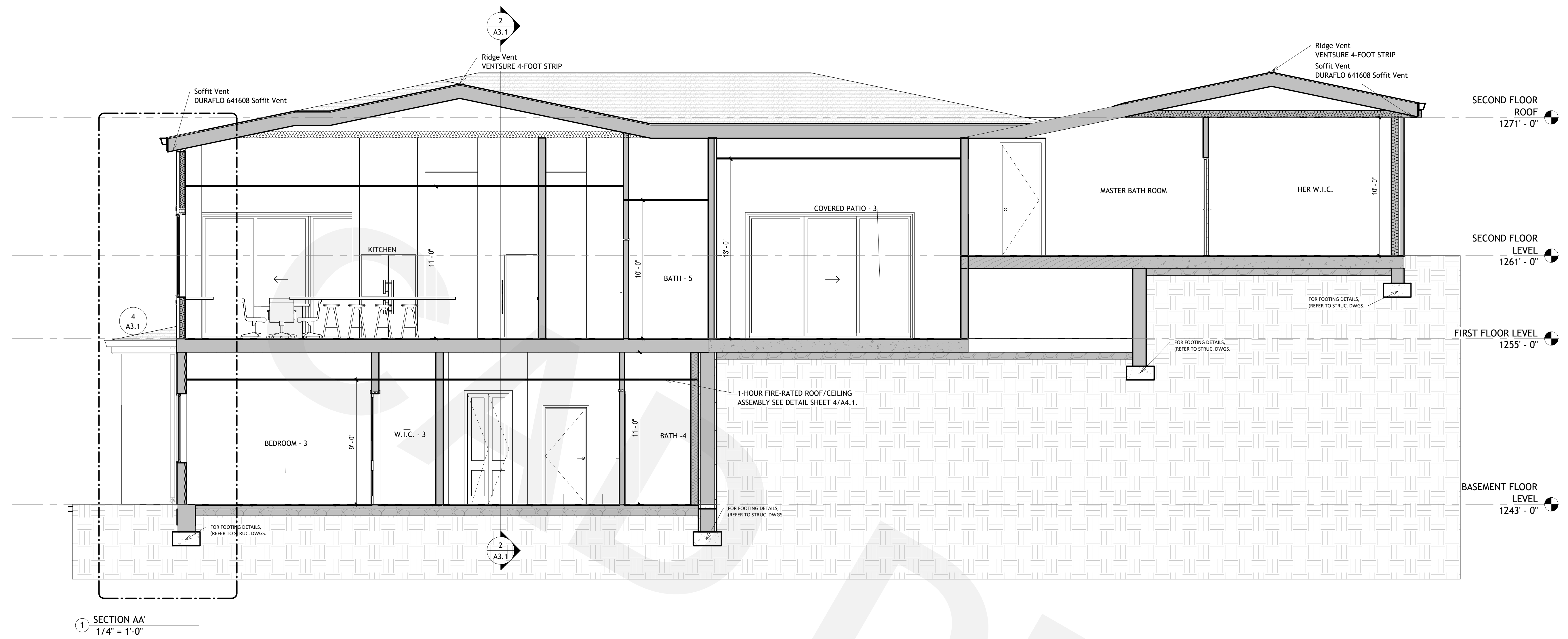


① LEFT ELEVATION
1/4" = 1'-0"

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ISSUE DATES	
TYPE	DATE
POWER REVIEW SET	
PERMIT SET	
SET	
INSTRUCTION SET	
BUILT SET	

DRAWN BY	AJ
CHECKED BY	AK
PROJECT NUMBER:	
10-02	
DATE:	
03-2026	
PROJECT TITLE:	
ACTION DETAILS	



5/8" ASPHALT SHINGLE
3/4" PLYWOOD
2" WOOD RAFTER

2" TOP PLATE
GYPSUM CEILING

ROOF
12/69 - 6 3/16"

SECTION AA' - TOP OF ROOF DETAIL TYP.

TWO-HOUR FIRE-RESISTANT RATED EXTERIOR WALL ASSEMBLY, RATED FOR EXPOSURE FROM INTERIOR SIDE (AND FROM EXTERIOR SIDE AS REQUIRED BY IBC 705.5)

UNTREATED WOOD RIM BOARD, DESIGNED TO SUPPORT FULL WALL LOAD. PROVIDE MULTIPLE RIM JOIST OR WIDER SINGLE RIM AS REQUIRED

FRITV WALL FRAMING (STUDS, PLATES, BLOCKING, ETC.)

FRITV WALL SHEATHING AS REQUIRED

EXTERIOR FIRE PROTECTION (AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATING PER IBC 705.5)

STUD WALL PER PLAN

FRITV WALL FRAMING (STUDS, PLATES, BLOCKING, ETC.)

ONE-HOUR FIRE-RESISTANCE-RATED FLOOR/CEILING ASSEMBLY MADE WITH UNTREATED FRAMING MEMBERS AND FLOOR SHEATHING

CEILING MEMBRANE (AS REQUIRED FOR ONE-HOUR FLOOR ASSEMBLY)

ONE OR MORE LAYERS OF UNTREATED WOOD BLOCKING AS REQUIRED. IF WALL IS REQUIRED TO BE RATED FROM THE EXTERIOR, BLOCKING MUST BE DESIGNED TO SUPPORT THE FULL WALL LOAD.

STUD WALL PER PLAN

NOTE:
FRITV = FIRE RETARDANT-TREATED WOOD
SEE AWC DCAS DOCUMENT FOR ADDITIONAL INFORMATION.

WOOD STRUCTURAL PANEL, SUBFLOOR, SEE STRUCTURAL DRAWINGS

CROSS BRIDGING OR SOLID BLOCKING PER LOCAL CODES

2X10 FLOOR JOISTS WITH FIREBLOCKING PER LOCAL CODES, SEE STRUCTURAL DRAWINGS

GYP. BD. CEILING

This diagram shows a cross-section of a floor assembly. From top to bottom, it consists of a wood structural panel (subfloor), cross bridging or solid blocking, 2x10 floor joists with fireblocking, and a gypsum board ceiling. Arrows point from the text labels to the corresponding components in the assembly.

MIN. 3/4" FLOOR FILL PER
UL DESIGN No. L502

MIN. 1/32" WOOD STRUCTURAL
PANEL, SUBFLOOR, SEE
STRUCTURAL DRAWINGS

MIN. 1X3 CROSS
BRIDGING OR 2X10 SOLID
BLOCKING

MIN. 2X10 FLOOR
JOISTS AT 16" O.C. WITH
FIREBLOCKING PER
LOCAL CODES, SEE
STRUCTURAL
DRAWINGS

MIN. R-11 BATT INSULATION

MIN. 1/2" TYPE 'X' GYP. BD.

VINYL PLANKS

RESILIENT CHANNELS
PERPENDICULAR TO JOISTS AT 24"
O.C.

Diagram illustrating the cross-section detail of a wall and footing assembly. The assembly includes a concrete slab and reinforcing, a 1/2" isolation joint, a preservative-treated sill plate w/ A.B. per S.W. SCHED., and a stud wall per plan. The footing and stem are shown below the slab, with an anchor w/ heavy hex nut at hold down. The diagram also indicates the minimum pier depth and the A.B. edge distance.

Labels and dimensions shown in the diagram:

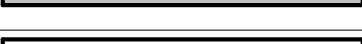
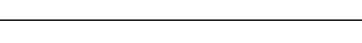
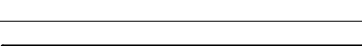
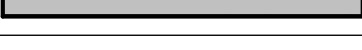
- STUD WALL PER PLAN
- PRESERVATIVE-TREATED SILL PLATE w/ A.B. PER S.W. SCHED.
- 1/2" ISOLATION JOINT
- CONCRETE SLAB & REINFORCING PER PLAN
- ANCHOR w/ HEAVY HEX NUT AT HOLD DOWN
- FOOTING AND STEM WALL AND REINFORCING PER PRESCRIPTIVE CODE REQUIREMENTS OR ENGINEERED DESIGN
- SEE PLAN & S.W. SCHED.
- MINIMUM PIER DEPTH OR SOILS REPORT
- A.B. EDGE DISTANCE
- $t' \geq 2 \frac{3}{4}"$ FOR 2x6
- $t' \geq 1 \frac{3}{4}"$ FOR 2x4

1 TYPICAL DETAILS AND SCHEDULES
1/2" = 1'-0"

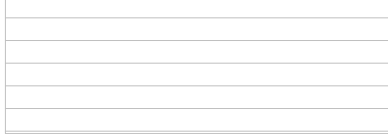
F-03	0+1R	
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ROOM SCHEDULE					
Number	Name	Area	Level		Department
1	COVERED PATIO - 1	498 SF	FIRST FLOOR LEVEL		NON-HABITABLE
2	COVERED PATIO - 2	148 SF	FIRST FLOOR LEVEL		NON-HABITABLE
3	COVERED PATIO - 3	293 SF	FIRST FLOOR LEVEL		NON-HABITABLE
4	FAMILY HALL	563 SF	FIRST FLOOR LEVEL		HABITABLE
5	DINING	189 SF	FIRST FLOOR LEVEL		HABITABLE
6	KITCHEN	697 SF	FIRST FLOOR LEVEL		HABITABLE
7	BEDROOM - 1	280 SF	FIRST FLOOR LEVEL		HABITABLE
8	W.I.C. - 1	30 SF	FIRST FLOOR LEVEL		HABITABLE
9	BATH - 2	110 SF	FIRST FLOOR LEVEL		HABITABLE
10	BEDROOM - 2	225 SF	FIRST FLOOR LEVEL		HABITABLE
11	W.I.C. - 2	35 SF	FIRST FLOOR LEVEL		HABITABLE
12	LAUNDRY	21 SF	FIRST FLOOR LEVEL		HABITABLE
13	BATH - 5	40 SF	FIRST FLOOR LEVEL		HABITABLE
14	PANTRY	34 SF	FIRST FLOOR LEVEL		HABITABLE
15	ELEVATOR	30 SF	FIRST FLOOR LEVEL		HABITABLE
16	STORAGE	18 SF	FIRST FLOOR LEVEL		HABITABLE
17	ENTRANCE HALL	402 SF	FIRST FLOOR LEVEL		HABITABLE
18	OFFICE	209 SF	FIRST FLOOR LEVEL		HABITABLE
19	CLOSET	23 SF	FIRST FLOOR LEVEL		HABITABLE
20	BACKYARD	205 SF	FIRST FLOOR LEVEL		HABITABLE
21	FAMILY ROOM - 2	554 SF	BASEMENT FLOOR LEVEL		HABITABLE
22	KITCHEN - 2	137 SF	BASEMENT FLOOR LEVEL		HABITABLE
23	BTBH - 3	103 SF	BASEMENT FLOOR LEVEL		HABITABLE
24	LAUNDRY - 1	46 SF	BASEMENT FLOOR LEVEL		HABITABLE
25	BEDROOM - 3	207 SF	BASEMENT FLOOR LEVEL		HABITABLE
26	W.I.C. - 3	35 SF	BASEMENT FLOOR LEVEL		HABITABLE
27	OFFICE - 2	140 SF	BASEMENT FLOOR LEVEL		HABITABLE
28	BATH - 4	53 SF	BASEMENT FLOOR LEVEL		HABITABLE
29	ELEVATOR EINT.	29 SF	BASEMENT FLOOR LEVEL		HABITABLE
30	ELEVATOR	44 SF	BASEMENT FLOOR LEVEL		HABITABLE
31	GARAGE 1 CAR	263 SF	BASEMENT FLOOR LEVEL		NON-HABITABLE
32	GARAGE 2 CAR	1023 SF	BASEMENT FLOOR LEVEL		NON-HABITABLE
33	UTILITY STORAGE	150 SF	BASEMENT FLOOR LEVEL		NON-HABITABLE
34	MASTER BATH ROOM	280 SF	SECOND FLOOR LEVEL		HABITABLE
35	HIS W.I.C.	76 SF	SECOND FLOOR LEVEL		HABITABLE
36	HER W.I.C.	180 SF	SECOND FLOOR LEVEL		HABITABLE
37	LAUNDRY - 2	35 SF	SECOND FLOOR LEVEL		HABITABLE
38	MECHANICAL ROOM	29 SF	BASEMENT FLOOR LEVEL		NON-HABITABLE
Grand total: 38					

ROOM FINISH SCHEDULE					
Number	Name	Floor Finish	Wall Finish	Ceiling Finish	Ceiling Heights
1	COVERED PATIO - 1	CONC.	STUCCO	GYPSUM BOARD	14'-0" & 16'-0"
2	COVERED PATIO - 2	CONC.	STUCCO	GYPSUM BOARD	11'-0"
3	COVERED PATIO - 3	CONC.	STUCCO	GYPSUM BOARD	13'-0"
4	FAMILY HALL	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	12'-0"
5	DINING	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	11'-0"
6	KITCHEN	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	11'-0"
7	BEDROOM - 1	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
8	W.I.C. - 1	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
10	BATH - 2	CERAMIC TILE	CERAMIC TILES	GYPSUM BOARD	10'-0"
11	BEDROOM - 2	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
12	W.I.C. - 2	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
13	LAUNDRY	CERAMIC TILE	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
14	BATH - 5	CERAMIC TILE	CERAMIC TILES	GYPSUM BOARD	10'-0"
15	PANTRY	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
17	STORAGE	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
18	ENTRANCE HALL	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	12'-0"
19	OFFICE	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	12'-0"
20	CLOSET	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	12'-0"
22	FAMILY ROOM - 2	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
23	KITCHEN - 2	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
24	BATH - 3	CERAMIC TILE	CERAMIC TILES	GYPSUM BOARD	9'-0"
25	LAUNDRY - 1	CERAMIC TILE	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
26	BEDROOM - 3	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
27	W.I.C. - 3	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
28	OFFICE - 2	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
29	BATH - 4	CERAMIC TILE	CERAMIC TILES	GYPSUM BOARD	9'-0"
30	FLR ENT.	CERAMIC TILE	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
32	GARAGE 1 CAR	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
34	GARAGE 2 CAR	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
35	UTILITY STORAGE	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"
37	MASTER BATH ROOM	CERAMIC TILE	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
39	HIS W.I.C.	CARPET FINISH	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
40	HIS W.I.C.	VINYL PLANKS	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
41	LAUNDRY - 2	CERAMIC TILE	GYPSUM WALL BOARD	GYPSUM BOARD	10'-0"
43	MECHANICAL ROOM	CONC.	GYPSUM WALL BOARD	GYPSUM BOARD	9'-0"

WALL LEGEND			TOTAL WIDTH
W1		12" CONCRETE STEM WALL	12"
W2		8" CONCRETE STEM WALL	8"
W3		INTERIOR PARTITION WALL - 2'X6" WOOD STUDS	6 1/2"
W4		STUCCO-6	18"
W5		INTERIOR-36_STONE	34"
W6		INTERIOR-12_2	12 1/2"
W7		GLASS SHOWER	4"
W8		INTERIOR-4	4 1/2"
W9		INTERIOR PARTITION WALL - FRR 1 HOUR - 2'X6" WOOD STUDS	6 1/2"
W10		STUCCO-6	7 1/2"
W11		INTERIOR-8_2	8 1/2"
W12		ROOM DIVIDER-1	6 1/2"
W13		STUCCO-12	13 1/2"
W14		INTERIOR-1_2	3 1/2"
W15		STUCCO-12_2	14"
W16		STUCCO-12_4	13 1/2"
W17		8" CONC. STEM WALL WITH FURRING 2 SIDES	3 1/2"
W18		INTERIOR-12_STONE	15 1/2"

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FLOOR FINISHES		WINDOW ENERGY REQUIREMENTS:
F-01		VINYL PLANKS
F-02		CERAMIC TILES
F-03		CONCRETE FINISH
F-04		CARPET FINISH

WINDOWS MUST BE TESTED AND LABELED PER NAFS-17 (AAMA/WDMA/CSA 101/1.5.2/4440). WINDOWS SHALL HAVE A MAXIMUM U-FACTOR OF 0.40 AND SOLAR HEAT GAIN COEFFICIENT (SHGC) OF 0.7.

DOOR SCHEDULE						
Type	Mark	Width	Height	Frame Type	Frame Finish	Count
D01	6'-0"	9'-0"	WOOD	WOOD	2	
D02	12'-0"	9'-0"	ALUMINUM	ALUMINUM	1	
D03	3'-0"	7'-0"	WOOD	WOOD-FINISH VARIES	16	
D04	2'-6"	8'-0"	WOOD	WOOD	3	
D05	5'-0"	8'-0"	WOOD	WOOD	1	
D06	5'-0"	8'-0"	WOOD	WOOD	1	
D07	3'-0"	8'-0"	ALUMINUM	ALUMINUM	1	
D08	2'-8"	8'-0"	WOOD	WOOD	3	
D09	3'-0"	8'-0"	WOOD	WOOD	1	
D10	20'-0"	8'-0"	ALUMINUM	ALUMINUM	1	
D11	8'-0"	8'-0"	ALUMINUM	ALUMINUM	1	
Grand total: 31						

CAD DRAFTER

D DRAFTER

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San Diego, CA 92110

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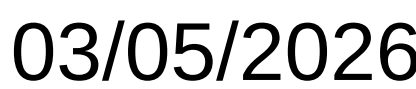
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Phoenix AZ 85042

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TYPE	DATE
OWNER REVIEW SET	
PERMIT SET	
BID SET	
CONSTRUCTION SET	
AS BUILT SET	

PROJECT NUMBER:	6110-02
DATE:	26-03-2026
SHEET TITLE:	TYPICAL DETAILS AND SCHEDULES

A4.1



Codes

1. Design and construction per City of Phoenix adopted building codes, including IBC and IRC, latest adopted editions and local amendments.

Design assumptions and materials

1. Allowable soil bearing assumed 2,000 psf unless a geotechnical report indicates otherwise.
2. Concrete $f'c = 4,000$ psi at 28 days, typical.
3. Reinforcing steel ASTM A615 Grade 60, typical.
4. Verify subgrade is firm, undisturbed native soil. Remove loose, wet, or disturbed material and replace with compacted structural fill.

Excavation and subgrade

1. Do not place concrete on muddy, softened, or loose subgrade. Protect excavations from water and erosion.
2. Footings shall bear on undisturbed soil or engineered fill. Notify engineer if unsuitable material is encountered.

Basement walls, Sections 1, 2, 3

1. Provide 12 inch reinforced concrete basement walls where shown. Reinforcement per Section 1 and plans.
2. Provide reinforced CMU basement walls where shown. Typical is 8 inch CMU with vertical #4 at 48 inches on center. Provide grout and reinforcement per Sections 2 and 3 and plans.
3. Provide bond beams, lintels, and wall reinforcing at openings per plans.
4. Provide dowels between footings and walls. Provide lap splices and development lengths per code and standard practice.

Waterproofing and drainage

1. Provide waterproofing or dampproofing on below grade walls as required. Protect coating during backfill.
2. Provide foundation drainage at exterior basement walls as detailed on plans. Route to an approved discharge point.

Backfill and compaction

1. Backfill only after walls are adequately braced by the floor system or as permitted by the design.
2. Well compacted backfill. 6 inch lifts. 95% MDD.
3. Keep heavy compaction equipment away from walls. Use light equipment near walls.

Interior load bearing wall and strip footing, Section 4

1. Interior load bearing wall line supports floor framing above. Frame per plans, 2x6 slab at 16 inches on center.
2. Provide 4 inch stud on grade with continuous strip footing 8 inches by 16 inches under the interior load bearing wall line, per Section 4 and plans.
3. Provide treated sill plate where wood bears on concrete. Anchor per code.

Lift pit area

1. Lift pit area to be sunken 12 inches below adjacent slab, per plans. Provide waterproofing and drainage provisions as required.

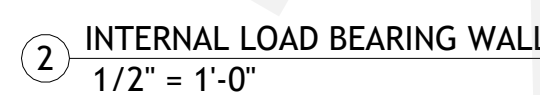
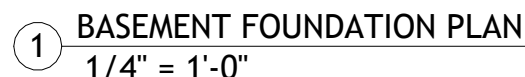
Partitions and posts

1. Provide 3-2x6 wood posts at load bearing partition corners and intersections where shown or required for load transfer.
2. Non load bearing 2x4 partitions to be framed after first floor framing is installed unless noted otherwise.

Moisture protection concrete foundations

The following locations require the use pressure-preservative treated wood (section r317.1):

1. Wood joists or the bottom of a wood structural floor when closer than 18" (or wood girders when closer than 12") to exposed ground
2. All sill plates that rest on concrete or masonry exterior walls and are less than 6" above ground
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground (unless separated from such slab by an impervious moisture barrier)
4. The ends of wood girders entering exterior masonry or concrete walls
5. Wood siding, sheathing and wall framing on the exterior of a building having a horizontal face of less than 6" from the ground or less than 2" measured vertically from concrete slab or patio slab or similar horizontal surface exposed to weather
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to weather, such as concrete or masonry slabs (unless separated from such floors or roofs by an impervious moisture barrier)
7. Wood framing strips attached directly to the exterior of exterior masonry walls or concrete walls below grade (except when an approved vapor retarder is applied between the wall and framing strips)



MAIN CONSULTANTS

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GEMTECH CORP.

7920 43rd Pl
Phoenix AZ 85042

REVISION DATE

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ISSUE DATES

TYPE	DATE
OWNER REVIEW SET	
PERMIT SET	
BID SET	
CONSTRUCTION SET	
AS BUILT SET	

DRAWN BY	MS
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CHECKED BY	MM
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PROJECT NUMBER

6110-02

DATE: _____

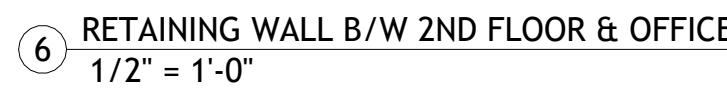
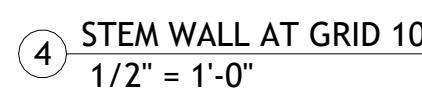
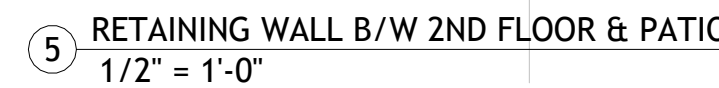
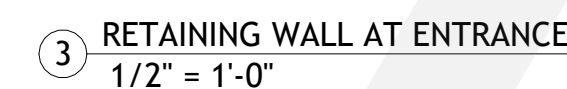
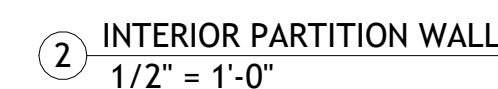
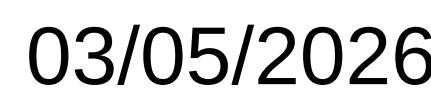
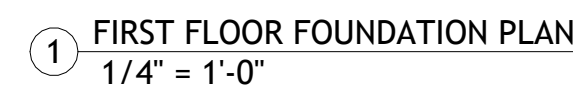
02/23/2026

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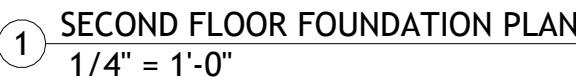
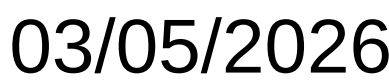
**BASEMENT FOUNDATION
LAYOUT**

SHEET NUMBER

S1.1



S1.2



Codes

1. Design and construction per City of Phoenix adopted building codes, including IBC and IRC, latest adopted editions and local amendments.

Design assumptions and materials

1. Allowable soil bearing assumed 2,000 psf unless a geotechnical report indicates otherwise.
2. Concrete $f'c = 4,000$ psi at 28 days, typical.
3. Reinforcing steel ASTM A615 Grade 60, typical.
4. Verify subgrade is firm, undisturbed native soil. Remove loose, wet, or disturbed material and replace with compacted structural fill.

Excavation and subgrade

1. Do not place concrete on muddy, softened, or loose subgrade. Protect excavations from water and erosion.
2. Footings shall bear on undisturbed soil or engineered fill. Notify engineer if unsuitable material is encountered.

- Retaining walls**
1. Provide 8 inch CMU Retaining walls where shown. Reinforcement per Section details.
 2. Provide reinforced CMU Stem walls where shown. Typical is 8 inch CMU with vertical #5 at 48 inches on center. Provide grout and reinforcement per code and standard practice.
 3. Provide bond beams, lintels, and wall reinforcing at openings per plans.
 4. Provide dowels between footings and walls. Provide lap splices and development lengths per code and standard practice.

Backfill and compaction

1. Backfill only after walls are adequately braced by the floor system or as permitted by the design.
2. Well compacted backfill. 6 inch lifts. 95% MDD. Special Inspection Required.
3. Keep heavy compaction equipment away from walls. Use light equipment near walls.

Interior load bearing wall and strip footing. Section 4

1. Interior load bearing wall line supports floor framing above. Frame per plans, 2x6 studs at 16 inches on center.
2. Provide 4 inch slab on grade with continuous strip footing 8 inches by 16 inches under the interior load bearing wall line, per Section 4 and plans.
3. Provide treated sill plate where wood bears on concrete. Anchor per code.

Lift pit area

1. Lift pit area to be sunken 12 inches below adjacent slab, per plans. Provide waterproofing and drainage provisions as required.

Partitions and posts

1. Provide 3-2x6 wood posts at load bearing partition corners and intersections where shown or required for load transfer.
2. Non load bearing 2x4 partitions to be framed after first floor framing is installed unless noted otherwise.

Moisture protection concrete foundations

The following locations require the use pressure-preservative treated wood (section r317.1):

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (or wood girders when closer than 12") to exposed ground
2. All sill plates that rest on concrete or masonry exterior walls and are less than 6" above exposed ground
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground (unless separated from such slab by an impervious moisture barrier)
4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 1/2" on tops, sides and ends
5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6" from the ground or less than 2" measured vertically from concrete slab or patio slab or similar horizontal surface exposed to weather
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to weather, such as concrete or masonry slabs (unless separated from such floors or roofs by an impervious moisture barrier)
7. Wood turning strips attached directly to the interior of exterior masonry walls or concrete walls below grade (except when an approved vapor retarder is applied between the wall and turning strips)
- 8.

MAIN CONSULTANT

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Phoenix AZ 85042

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AS BUILT SET	

DRAWN BY	MS
CHECKED BY	MM
PROJECT NUMBER:	
6110-02	
DATE:	
02/23/2026	
SHEET TITLE:	
SECOND FOUNDATION LAYOUT	

SHEET NUMBER

S1.3



03/05/2026

STRUCTURAL NOTES

General plan coordination

- Structural plan lines are schematic. Contractor shall build per wall callouts, sections, and these notes. Notify engineer of conflicts with architectural, MEP, or field conditions.
- Verify wall locations, opening sizes, and bearing lines prior to framing or masonry. Do not relocate bearing walls, posts, or openings without review.

Wall type identification. Provide per plan callouts

- 2x4 wood stud walls. Typical non load bearing unless noted otherwise.
- 2x6 wood stud walls. Load bearing where shown. Studs at 16 inches on center unless noted otherwise.
- 8 inch CMU walls. Reinforced CMU per sections and plan callouts.
- 12 inch reinforced concrete walls. Provide per Section 1 and plans.
- 8 inch reinforced concrete walls. Provide where shown. Reinforcement per wall section and plans.

Masonry walls. Bond beams and grout

- Provide continuous bond beam at top of CMU walls where shown.
- Reinforce and grout per sections.
- Provide intermediate bond beams where shown. Coordinate bond beam elevations with floor framing and opening heads.
- Grout reinforced cells and bond beam courses per plans and typical practice. Do not leave reinforcing ungrouted.

Openings. Lintels and headers

- Provide lintel beams over all masonry openings. Lintel size, rebar, and bearing length per sections and plan callouts.
- For wood framed openings, provide headers per plan callouts. Jack studs and king studs per typical framing practice.

Vertical reinforcement and anchorage

- Place vertical bars at spacing shown on plans. Lap splices per code and standard practice.
- Provide dowels at wall starts, ends, corners, and intersections. Provide dowels into footings and slabs where detailed.
- Anchor wood sill plates to concrete or grouted CMU per code. Provide washers and required embedment.

Posts, columns, and concentrated loads

- Provide posts at locations shown. Do not offset or remove.
- Provide 6x6 wood posts at load bearing partition corners and intersections where indicated for load transfer.
- Provide solid blocking, straps, and connectors where point loads occur. Provide continuous load path to foundation.

Floor framing. Layout and support

- Frame floor system to bear on designated bearing walls and beams.
- Maintain bearing length per code and manufacturer requirements.
- Provide joist hangers where joists do not bear directly on framing. Install per manufacturer.
- Provide blocking at bearing lines, ends of joists, and at concentrated loads.

Lateral and load path

- Maintain shear wall or braced wall locations as shown. Do not cut or notch these elements without review.
- Provide hold downs, straps, and tie downs where shown. Install with specified fasteners only.

MEP and penetrations

- Do not cut, notch, or drill structural members beyond code limits. Any oversized penetrations in beams, headers, or bearing studs require review.
- Coordinate sleeves and embeds at slab and walls prior to concrete placement.

Construction sequencing

- Frame non load bearing partitions after floor framing is installed unless noted otherwise.
- Do not backfill until walls are braced by the floor system as designed.

Wall ID	Sheathing Material	Panel Nailing	BMg to S&B & Top plate	Anchor Bolt	Bolt Spacing	Bolt Embedment	Butt Edge (But Edge)	Distance	Diaphragm	Shear	Stl. Plate	Mfr. Bkg.	Wd. Bkg.	Wooden	Special
		Edges	Fields	ASB @ 48" o.c. to 3x4	3x @ 48" o.c.	7"	1.75"	2"	220	15d common nail @ 6" o.c.	2x-2x	2x-2x	2x-2x	2x-2x	NO
	1/2" PLYD BLOCKED	8d @ 6" o.c.	8d @ 12" o.c.	ASB @ 48" o.c. to 3x4	3x @ 48" o.c.	7"	1.75"	2"	220	15d common nail @ 6" o.c.	2x-2x	2x-2x	2x-2x	2x-2x	NO
	1/2" PLYD BLOCKED	8d @ 6" o.c.	8d @ 12" o.c.	ASB @ 48" o.c. to 3x4	3x @ 48" o.c.	7"	1.75"	2"	220	15d common nail @ 6" o.c.	2x-2x	2x-2x	2x-2x	2x-2x	NO
	15/32" PLYWOOD STRIP	10d @ 4" o.c.	10d @ 12" o.c.	ASB @ 24" o.c. to 3x4	1" @ 24" o.c.	10"	1.75"	2"	450	20d common nail @ 6" o.c.	2x-3x	2x-3x	2x-3x	2x-3x	YES
	15/32" PLYWOOD STRIP	10d @ 4" o.c.	10d @ 12" o.c.	ASB @ 24" o.c. to 3x4	1" @ 24" o.c.	10"	1.75"	2"	450	20d common nail @ 6" o.c.	2x-3x	2x-3x	2x-3x	2x-3x	YES
	15/32" PLYD BLOCKED	10d @ 3" o.c.	10d @ 12" o.c.	ASB @ 36" o.c. to 3x4	3x @ 36" o.c.	10"	1.75"	2"	620	20d common nail @ 6" o.c.	3x-3x	2x-3x	2x-3x	2x-3x	YES
	15/32" PLYD BLOCKED	10d @ 3" o.c.	10d @ 12" o.c.	ASB @ 36" o.c. to 3x4	3x @ 36" o.c.	10"	1.75"	2"	620	20d common nail @ 6" o.c.	3x-3x	2x-3x	2x-3x	2x-3x	YES
	15/32" PLYD BLOCKED	10d @ 3" o.c.	10d @ 12" o.c.	ASB @ 36" o.c. to 3x4	3x @ 36" o.c.	10"	1.75"	2"	1020	20d common nail @ 6" o.c.	3x-3x	2x-3x	2x-3x	2x-3x	YES

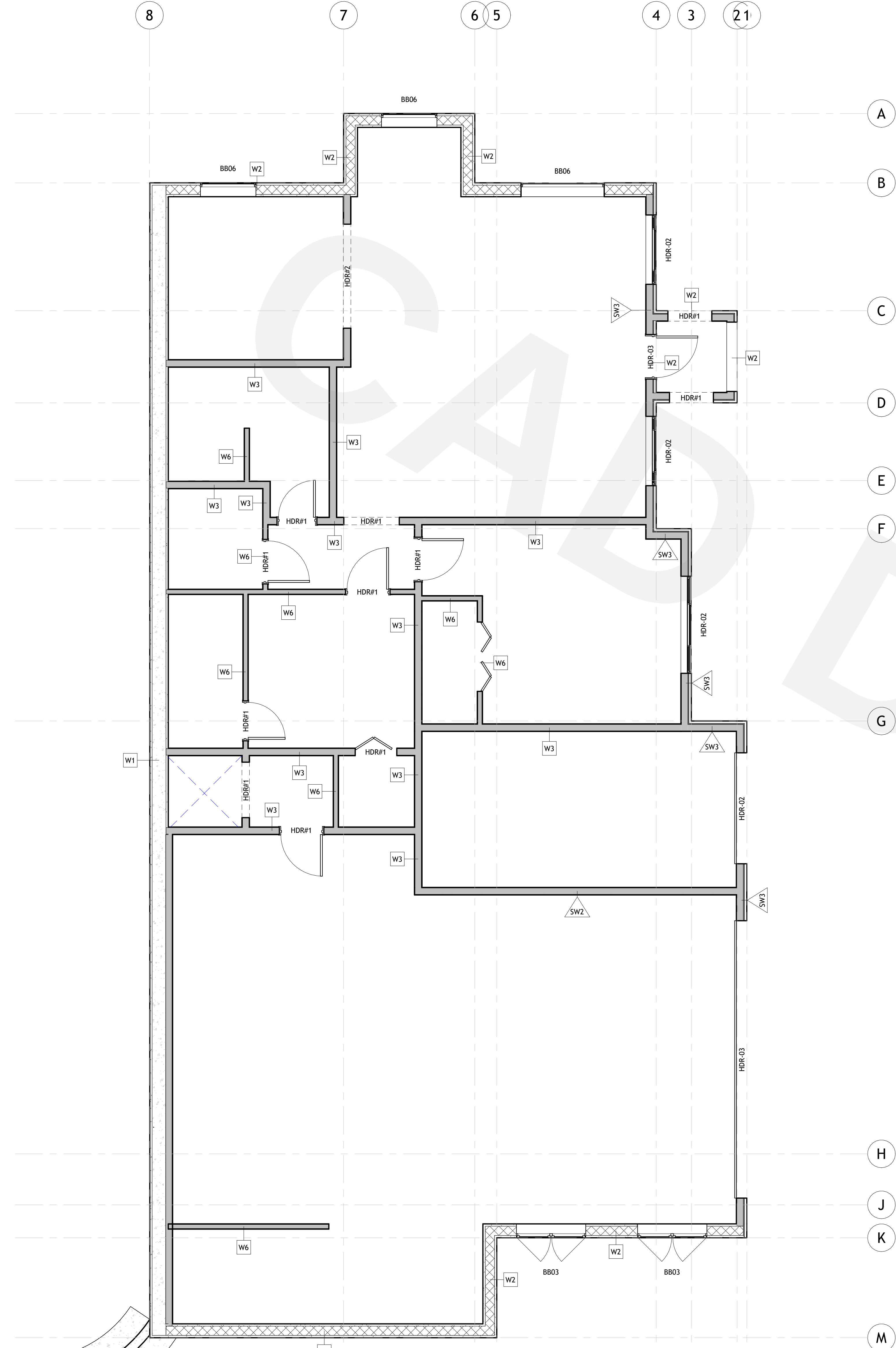
Notes:
1) This nailing schedule is for common nails only and all panels edges fastened to framing. Plywood can be installed either horizontally or vertically.
2) Shear Plates 3.4.2.2 & 3.3 requires 3X framing members at the bottom all plate when resting on concrete.
3) And behind vertical or horizontal panel edges. Also require 12" edge nailing distance at panel ends and edges.
4) Framing at exterior panel edges shall be minimum 2" nailing into the edge of the panel and into the edge of the panel.
5) Use square plate washers 3" x 3" x 1/4" for 5/8" diameter bolts.
6) Use existing structural for adequacy.

MARK	HOLDOWN	END POST	UPLIFT CAPACITY	WALL ATTACHMENT	HOLDOWN SCHEDULE	FOR EXISTING FOOTING	HOLDOWN DETAIL
HUE3	HUE3	4x6 SPF#2	2.3 kips	AS PER MANUFACTURER	5/8" DIA. ANCHOR BOLTS W/ 10" EMBEDMENT. SPL. INSPECTION REQD.	AT 30" w/c B F1554 GR. 3x w 10" EMBEDMENT. SPL. INSPECTION REQD.	SEE DETAIL - 351.3
HUE5	HUE5	4x6 SPF#2	4.2 kips	AS PER MANUFACTURER	5/8" DIA. ANCHOR BOLTS W/ 10" EMBEDMENT. SPL. INSPECTION REQD.	AT 30" w/c B F1554 GR. 3x w 10" EMBEDMENT. SPL. INSPECTION REQD.	SEE DETAIL - 351.3
HUE5	HUE5	4x6 SPF#2	5.9 kips	AS PER MANUFACTURER	7/8" DIA. ANCHOR BOLTS W/ 10" EMBEDMENT. SPL. INSPECTION REQD.	AT 30" w/c B F1554 GR. 3x w 10" EMBEDMENT. SPL. INSPECTION REQD.	SEE DETAIL - 351.3

NOTE:
1. HOLDOWNS SHALL BE MANUFACTURED BY SIMPSON OR SHALL BE OF EQUIVALENT CAPACITY W/ A.C.C. ESR REPORTS.
2. SEE SHEAR WALL SCHEDULE FOR SHEARWALL REQUIREMENTS AND DESIGNATIONS.
3. REFER TO PLANS FOR HOLDOWN LOCATIONS.
4. USE HOLDOWNS AS PER CAPACITY GIVEN IN THE TABLE IF CHANGE IN SHEARWALL REQUIRED ON SITE.

PNEUMATIC FASTENER SCHEDULE				
PNEUMATIC FASTENER - ITW RAMSET / REDHEAD				
APPLICATION	NAIL SIZE	TYPE	SPACING	REMARKS
GARAGE DOOR BUCK TO CONC. BLOCK C/D	300 HD 7/8" WASHER 3" LONG	SERIES 1524 SD	6" O.C.	5/32" DIA. SHANK W/HEAD W/ R LOGO STAMP
MTL STRAP TO CONC. BLOCK OR THE BEAM	1 1/2" LONG	SERIES 1524	MIN. 3 PINS PER STRAP	0.143" DIA. SHANK MIN. 2" FROM EDGE OF CONC.
NON-BEARING WALL SILL PLATE TO CONC. SLAB AND KNEEWALLS	300 HD 7/8" WASHER 3" LONG	SERIES 1524 SD	12" O.C.	5/32" DIA. SHANK W/HEAD W/ R LOGO STAMP
METAL LATH & WIRE FASTENERS - PNEU-FAST CO.				
WIRE LATH	16 GAUGE W/ MIN. 1 1/4" PENETRATION	#101-1	6" APART SIDE LAPS	SEE S.F.B.C. SECTION 3502.3 & 3504.2 (C)(b)
3/8" RIB MTL. LATH	16 GAUGE W/ MIN. 1 1/4" PENETRATION	#101-1	6" APART SIDE LAPS	SEE S.F.B.C. SECTION 3502.3 & 3504.2 (C)(b)
ROOF/WALL SHEATHING - ATLAS COLLATED NAILS				
12" (APA 1932)	2" X 11 1/2"	6d COATED PLN SHK	EDGES - 6" ROOF - 12"	SEE S.F.B.C. SECTION 2902.2
5/8" (APA 1932)	2 1/2" X 13 1/2"	10d COATED PLN SHK	EDGES - 6" INTER - 4"	SEE S.F.B.C. SECTION 2902.2
FRAMING BUCKS AT EXT - ITW REMSET / REDHEAD				
SLIDING GLS. DOORS (2 X 4 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	6" O.C.	5/32" DIA. SHANK W/HEAD W/ R LOGO STAMP
WINDOW BUCKS (1 X 3 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	6" O.C.	5/32" DIA. SHANK W/HEAD W/ R LOGO STAMP
EXT. SWING DOORS (2 X 4 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	6" O.C.	5/32" DIA. SHANK W/HEAD W/ R LOGO STAMP
1. HAND NAILING MAY BE USED IN LIEU OF POWER DRIVEN FASTENERS. 2. STAPLES SHALL NOT BE USED FOR THE ATTACHMENT OF UNDERLAYMENT ANCHORS SHEETS, ASPHALT SHINGLES OR TIN CAPS STAPLES SHALL NOT BE USED FOR THE ATTACHMENT OF ROOF SHEATHING TO ROOF FRAMING MEMBERS. 3. FASTENING OF GARAGE DOORS, WINDOWS, AND EXTERIOR SWING DOORS TO FRAMING BUCKS SHALL BE AS PER MANUFACTURERS SPECS. 4. ALL FASCIA MATERIAL SHALL BE HAND FRAMED.				

WOODEN HEADER SCHEDULE			
MARK	HDR SIZE	HDR POST	JAMB
HDR - 1	2-2x8 SPF#1	2-2x6 SPF#2	2-2x6 SPF#2
HDR - 2	3-2x12 SPF#1	2-2x6 SPF#2	2-2x6 SPF#2
HDR - 3	3-1.75x12 LVL	2-2x6 SPF#2	2-2x6 SPF#2
HDR - 4	3-1.75x18 LVL	2-2x6 SPF#2	2-2x6 SPF#2



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

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6110-02

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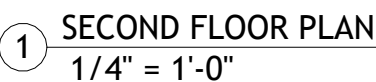
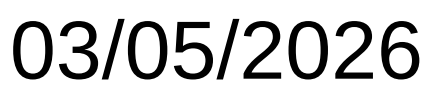
02/23/2026

SHEET TITLE

BASEMENT WALLS LAYOUT
PLAN

SHEET NUMBER

S2.1



General plan coordination

1. Structural plan lines are schematic. Contractor shall build per wall callouts, sections, and these notes. Notify engineer of conflicts with architectural, MEP, or field conditions.
 2. Verify wall locations, opening sizes, and bearing lines prior to framing or masonry. Do not relocate bearing walls, posts, or openings without review.
- Wall type identification. Provide per plan callouts**
1. **2x4 wood stud walls.** Typical non load bearing unless noted otherwise.
 2. **2x6 wood stud walls.** Load bearing where shown. Studs at 16 inches on center unless noted otherwise.
 3. **8 inch CMU walls.** Reinforced CMU per sections and plan callouts.
 4. **12 inch reinforced concrete walls.** Provide per Section 1 and plans.
 5. **8 inch reinforced concrete walls.** Provide where shown. Reinforcement per wall section and plans.

- Masonry walls, Bond beams and grout**
1. Provide continuous bond beam at top of CMU walls where shown. Reinforce and grout per sections.
 2. Provide intermediate bond beams where shown. Coordinate bond beam elevations with floor framing and opening heads.
 3. Grout reinforced cells and bond beam courses per plans and typical practice. Do not leave reinforcing ungrouted.

- Openings, Lintels and headers**
1. Provide lintel beams over all masonry openings. Lintel size, rebar, and bearing length per sections and plan callouts.
 2. For wood framed openings, provide headers per plan callouts. Jack studs and king studs per typical framing practice.

- Vertical reinforcement and anchorage**
1. Place vertical bars at spacing shown on plans. Lap splices per code and standard practice.
 2. Provide dowels at wall starts, ends, corners, and intersections. Provide dowels into footings and slabs where detailed.
 3. Anchor wood sill plates to concrete or grouted CMU per code. Provide washers and required embedment.

- Posts, columns, and concentrated loads**
1. Provide posts at locations shown. Do not offset or remove.
 2. Provide 6x6 wood posts at load bearing partition corners and intersections where indicated for load transfer.
 3. Provide solid blocking, straps, and connectors where point loads occur. Provide continuous load path to foundation.

- Floor framing. Layout and support**
1. Frame floor system to bear on designated bearing walls and beams. Maintain bearing length per code and manufacturer requirements.
 2. Provide joist hangers where joists do not bear directly on framing. Install per manufacturer.
 3. Provide blocking at bearing lines, ends of joists, and at concentrated loads.

- Lateral and load path**
1. Maintain shear wall or braced wall locations as shown. Do not cut or notch these elements without review.
 2. Provide hold downs, straps, and tie downs where shown. Install with specified fasteners only.

- MEP and penetrations**
1. Do not cut, notch, or drill structural members beyond code limits. Any oversized penetrations in beams, headers, or bearing studs require review.
 2. Coordinate sleeves and embeds at slab and walls prior to concrete placement.

- Construction sequencing**
1. Frame non load bearing partitions after floor framing is installed unless noted otherwise.
 2. Do not backfill until walls are braced by the floor system as designed.

Notes:

- 1) This nailing schedule is for common nails only and all panels edges fastened to framing. Plywood can be installed either horizontally or vertically.
- 2) Shear Panels 3.4.2.2 & 3.3 requires 3K framing members at the bottom sill plate when resting on concrete, and behind vertical or horizontal panel edges. Also minimum 1/2" edge nailing distance at panel ends and edges. *Framing at adjoining panel edges shall be nominal 3" or wider, nails shall be staggered in two lines along panel edges when nail spacing is 2" o.c., when 10d common nails spaced 3" o.c. penetrate framing more than 1-5/8".
- 3) Use square plate washers 3" x 3" x 1/4" thick, for 5/8" diameter bolts.
- 4) Verify existing shearwall for adequacy.

NOTE:-

1. HOLDOWNS SHALL BE MANUFACTURED BY SIMPSON OR SHALL BE OF EQUIVALENT CAPACITY W/ A ICC ESR REPORTS.
2. SEE "SHEAR WALL" SCHEDULE FOR SHEARWALL REQUIREMENTS AND DESIGNATIONS.
3. REFER TO PLANS FOR HOLDOWN LOCATIONS.
4. USE HOLDOWNS AS PER CAPACITY GIVEN IN THE TABLE IF CHANGE IN SHEARWALL REQUIRED ON SITE.

METAL LATH & WIRE FASTENERS - PNEU-FAST CO.				
WIRE LATH	16 GAUGE W/ MIN. 1 1/4" PENETRATION	#101-1	6" APART SIDE LAPS 9" APART	SEE S.F.B.C. SECTION 3502.3 & 3504.2 (C)(bb)
3/8" RIB MTL. LATH	16 GAUGE W/ MIN. 1 1/4" PENETRATION	#101-1	6" APART SIDE LAPS 9" APART	SEE S.F.B.C. SECTION 3502.3 & 3504.2 (C)(bb)

FRAMING BUCKS AT EXT - ITW REMSET / REDHEAD				
SLIDING GLS. DOORS (2 X 4 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	9" O.C.	5/32" DIA. SHANK W/HE W/ R' LOGO STAMP
WINDOW BUCKS (1 X 3 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	9" O.C.	5/32" DIA. SHANK W/HE W/ R' LOGO STAMP
EXT. SWING DOORS (2 X 4 P.T.)	300 HD 7/8" WASHER 1 3/8" LONG	SERIES 1524 SD	9" O.C.	5/32" DIA. SHANK W/HE W/ R' LOGO STAMP

1. HAND NAILING MAY BE USED IN LIEU OF POWER DRIVEN FASTENERS
2. STAPLES SHALL NOT BE USED FOR THE ATTACHMENT OF UNDERLAYMENT ANCHORS SHEETS, ASPHALT SHINGLES OR TIN CAPS STAPLES SHALL NOT BE USED FOR THE ATTACHMENT OF ROOF SHEATHING TO ROOF FRAMING MEMBERS
3. FASTENING OF GARAGE DOORS, WINDOWS, AND EXTERIOR SWING DOORS TO FRAMING BOARDS SHALL BE AS PER MANUFACTURERS SPEC'S.
4. ALL FASCIA MATERIAL SHALL BE HAND FRAMED.

WOODEN HEADER SCHEDULE			
MARK	HDR SIZE	HDR POST	JAMB
HDR - 1	2-2x8 SPF#1	2-2x8 SPF#2	2-2x8 SPF#2
HDR - 2	3-2x12 SPF#1	2-2x8 SPF#2	2-2x8 SPF#2
HDR - 3	3-1.75x12 LVL	2-2x8 SPF#2	3-2x8 SPF#2
HDR - 4	3-1.75x18 LVL	2-2x8 SPF#2	3-2x8 SPF#2

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PROJECT NUMBER:

6110-02

02/23/2026

SHEET TITLE:

SECOND FLOOR WALLS

LAYOUT PLAN

SHEET NUMBER:

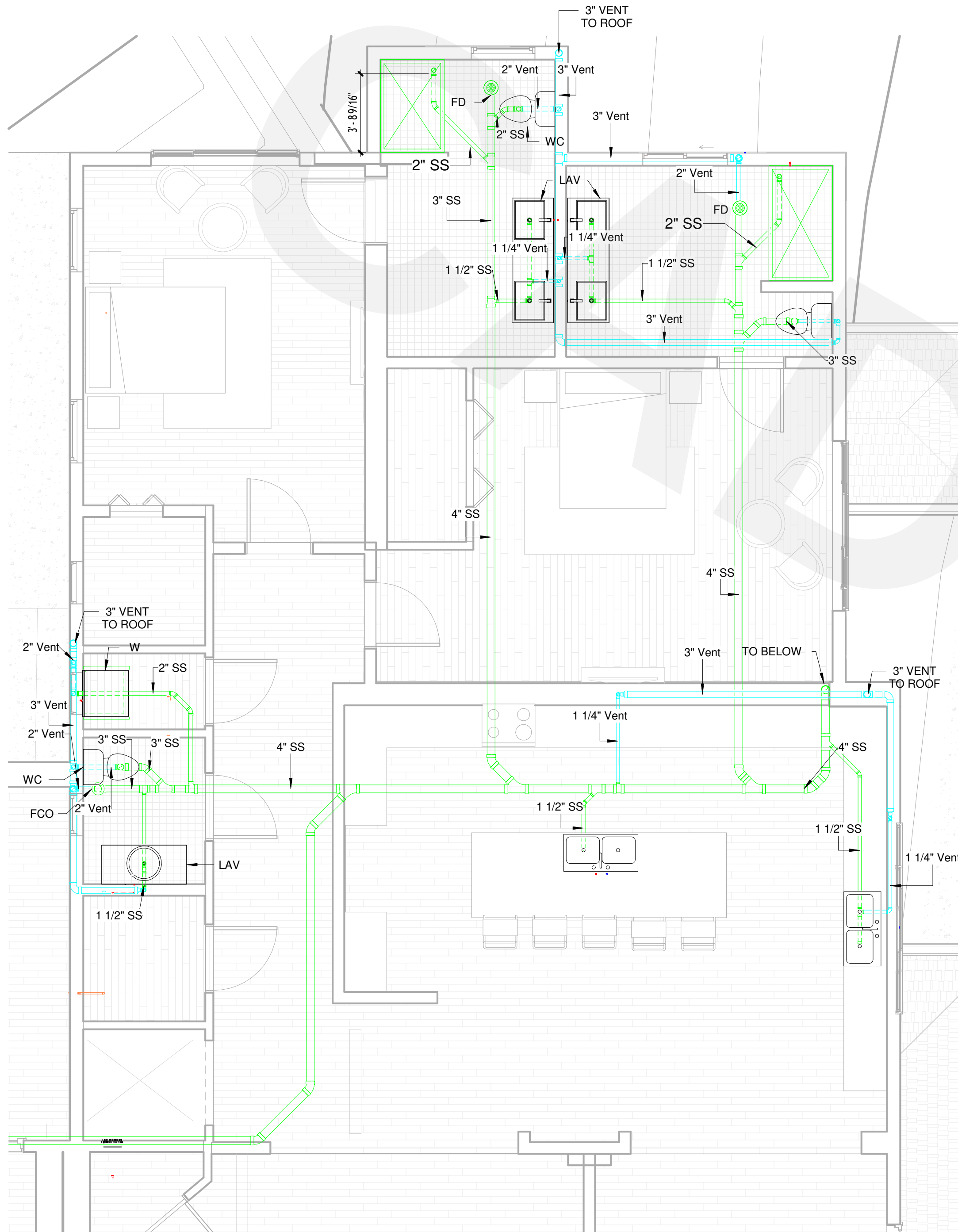
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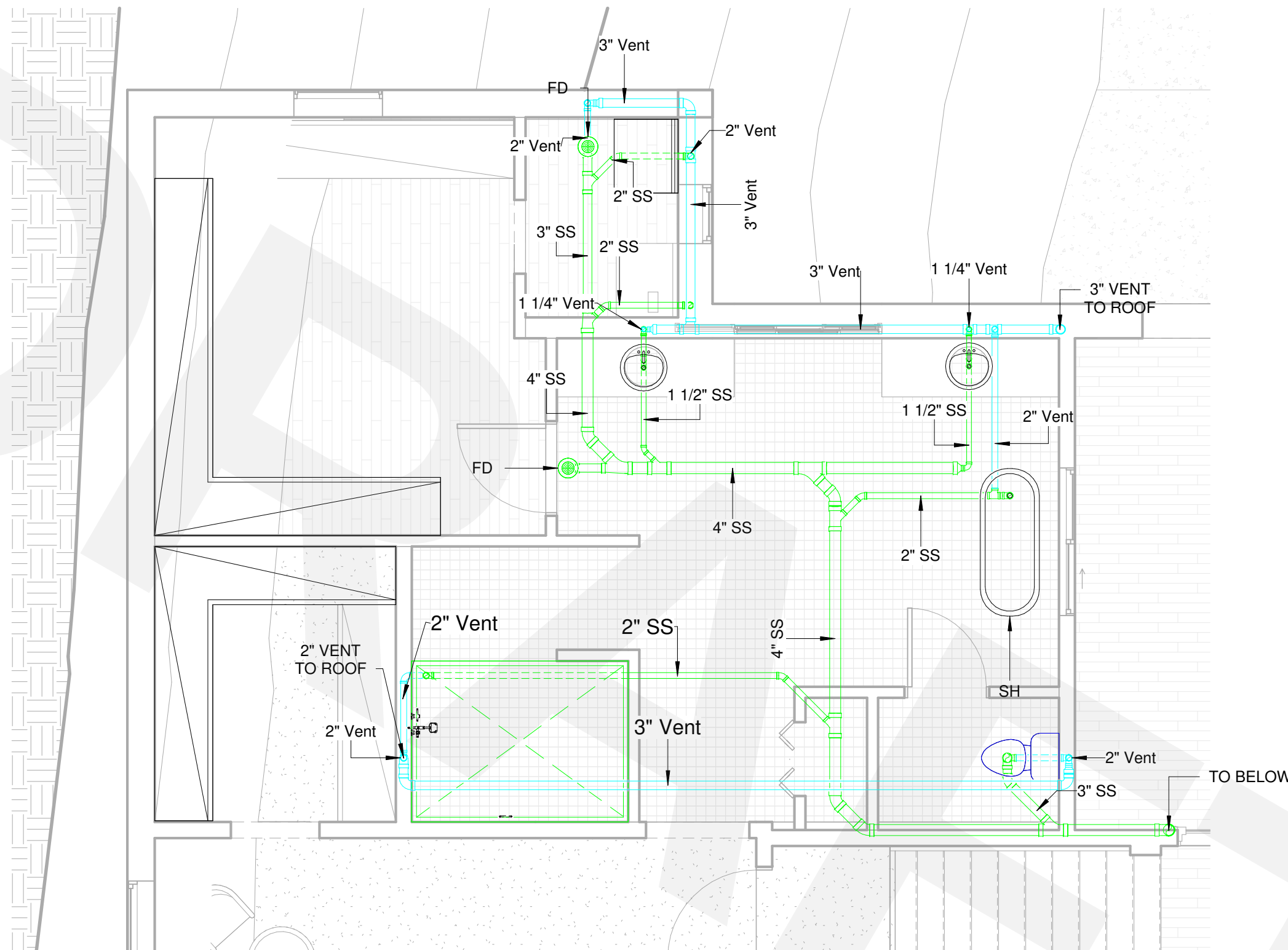
GENERAL NOTES

- ALL SANITARY SEWER WORK SHALL COMPLY WITH IPC 2018, IRC, AND CITY OF PHOENIX AMENDMENTS, WITH APPROVED MATERIALS PER IPC 702.
- CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS, ELEVATIONS, AND PIPE ROUTING BEFORE INSTALLATION AND PROTECT ALL PIPING FROM DAMAGE.
- SEWER AND DRAINAGE PIPING SHALL BE SIZED PER IPC TABLE 710.1 AND INSTALLED AT MINIMUM SLOPES OF 1/4 IN/FT FOR $\leq 2\frac{1}{2}$ " PIPE AND 1/8 IN/FT FOR ≥ 3 " PIPE.
- ALL DRAINAGE FITTINGS SHALL BE SANITARY OR LONG-SWEEP TYPE; NO SHORT-RADIUS 90° ELBOWS IN HORIZONTAL DRAINAGE.
- CLEANOUTS SHALL BE INSTALLED PER IPC 708 AT CHANGES OF DIRECTION >135°, EVERY 100 FT OF HORIZONTAL PIPING, AND AT THE BASE OF STACKS.
- EACH FIXTURE SHALL HAVE A TRAP PER IPC 1002; NO S-TRAPS OR BELL TRAPS. PROVIDE TRAP PRIMERS WHERE REQUIRED.
- VENTING SHALL COMPLY WITH IPC CHAPTER 9, PREVENTING TRAP SIPHONAGE; VENT TERMINATIONS SHALL MEET IPC 904.
- PROVIDE BACKWATER VALVE WHERE REQUIRED BY CITY OF PHOENIX OR WHERE SEWER FLOW RISK EXISTS.
- SEWER SYSTEMS SHALL BE TESTED PER IPC 312 USING A 10-FT WATER TEST OR 5-PSI AIR TEST BEFORE COVER OR CONCEALMENT.



1 FIRST FLOOR PLUMBING PLAN

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



2 SECOND FLOOR PLUMBING PLAN

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

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7920 43rd Pl
Phoenix AZ 85042

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5110-02

DATE:
04/03/2026

SHEET TITLE:

PLUMBING SEWERAGE PLANS

SHEET NUMBER:

P101



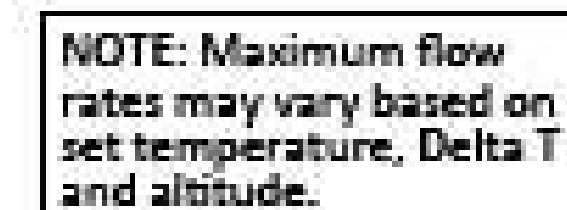
- * 0 in. from vent components.
- * Clearance for servicing is 24 in. (610 mm) in front of water heater.
- ** Add 0.25 in. (6.35 mm) for recess box.

¹ Activation flow rate may vary slightly depending on the temperature setting and the inlet water temperature.

² The maximum gas supply pressure must not exceed the value specified by the manufacturer.

³ Rainai products are continually being updated and improved; therefore, specifications are subject to change without prior notice.

Flow curves apply only to incoming water temperatures of 70° F (21° C) or less.
For incoming water temperatures greater than 70° F (21° C), please contact Rinnai.



The diagram shows the bottom view of the condenser unit with the following labels and dimensions:

- Labels:** Hot Outlet, Cold Inlet, Condensate Drain, Gas.
- Dimensions:**
 - D:** Total height.
 - H:** Height to the top of the condenser coils.
 - A:** Distance from the left side to the center of the hot outlet.
 - C:** Distance from the left side to the center of the cold inlet.
 - E:** Distance from the center of the cold inlet to the center of the gas inlet.
 - F:** Total width.
 - G:** Distance from the left side to the center of the gas inlet.
- Table:**

Connection	in.	mm.
COLD	A	0.37 9
	B	3.60 91
	C	5.10 130
HOT	D	6.20 158
	E	5.60 142
	F	2.83 72
GAS	G	7.13 181
	H	5.32 135
- Note:** 0.60 [15] (refers to the distance from the bottom edge to the center of the cold inlet).

- ALL SANITARY SEWER WORK SHALL COMPLY WITH IPC 208, IRC, AND CITY OF PHOENIX AMENDMENTS, WITH APPROVED MATERIALS PER IPC 702.
- CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS, ELEVATIONS, AND PIPE ROUTING BEFORE INSTALLATION AND PROTECT ALL PIPING FROM DAMAGE.
- SEWER AND DRAINAGE PIPING SHALL BE SIZED PER IPC TABLE 710.1 AND INSTALLED AT MINIMUM SLOPES OF 1/4 IN/FT FOR 22" PIPE AND 1/8 IN/FT FOR 23" PIPE.
- ALL DRAINAGE FITTINGS SHALL BE 52° OR LONG-SWEEP TYPE; NO SHORT-RADIUS 90° ELBOWS IN HORIZONTAL DRAINAGE.
- CLEANOUTS SHALL BE INSTALLED PER IPC 708 AT CHANGES OF DIRECTION >135°, EVERY 100 FT OF HORIZONTAL PIPING, AND AT THE BASE OF STACKS.
- EACH FIXTURE SHALL HAVE A TRAP PER ICD 1002; NO S-TRAPS OR BELL TRAPS. PROVIDE TRAP PRIMERS WHERE REQUIRED.
- VENTING SHALL COMPLY WITH IPC CHAPTER 9, PREVENTING TRAP SIPHONAGE; VENT TERMINATIONS SHALL MEET IPC 904.
- PROVIDE BACKWATER VALVE WHERE REQUIRED BY CITY OF PHOENIX OR WHERE SEWER FLOW RISK EXISTS.
- SEWER SYSTEMS SHALL BE TESTED PER IPC 312 USING A 10-FT WATER TEST OR 5-PSI AIR TEST BEFORE COVER OR CONCEALMENT.

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PLUMBING SEWERAGE PLANS	

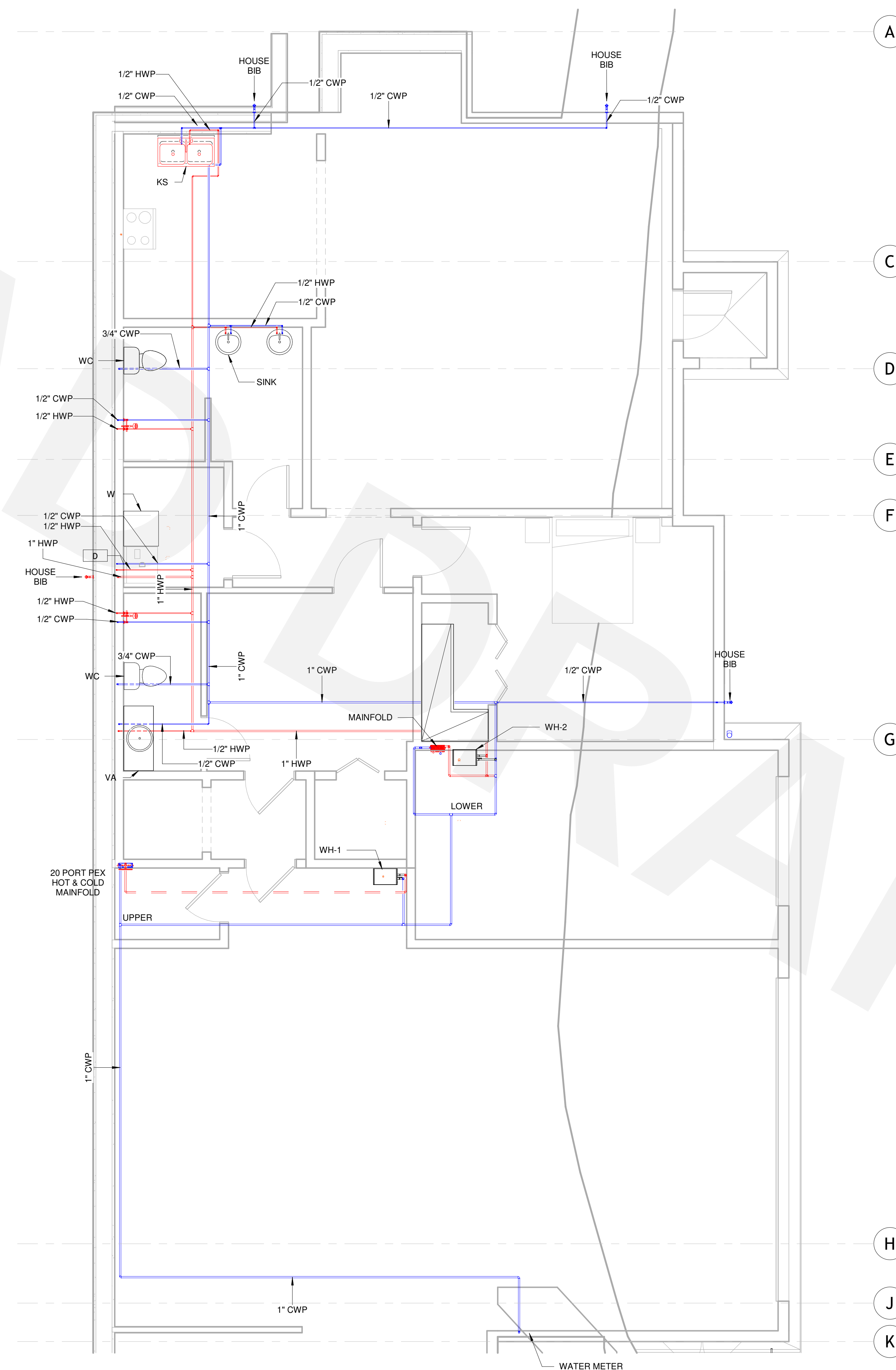
P102



- ## PLUMBING NOTES
1. INSTALLATION SHALL COMPLY WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODES AND LOCAL CODES THAT EXCEED THE BOUNDARIES OF THE INTERNATIONAL PLUMBING CODE
 2. CONTRACTOR TO MAKE ARRANGEMENTS TO PAY FOR ALL FEES, PERMITS, LICENSES, CONNECTION FEES AND INSPECTIONS REQUIRED FOR PLUMBING WORK. PERFORM REQUIRED TESTS AND SECURE THE REQUIRED INSPECTIONS PRIOR TO BACKFILLING.
 3. ALL OVERHEAD PIPING SHALL BE SUSPENDED FROM STRUCTURE ABOVE WITH PIPE HANGERS. PIPING ON ROOF MAY BE SUSPENDED BY 4X4 REDWOOD BLOCKS SET ON SHEET METAL BASES WITH HAMMERED EDGES AND SET IN MASTIC, PROVIDE HOLD DOWN CLAMPS (F ACCEPTABLE WITH LOCAL CODES.)
 4. ALL FIXTURES TO HAVE ACCESSIBLE STOPS.
 5. DOMESTIC WATER PIPING: WHEN CONSTRUCTION DOCUMENTS ARE NOT ACCOMPANIED BY A PLUMBING MATERIALS LIST THE DOMESTIC PIPING SHALL BE TYPE M COPPER. PLASTIC PIPING IS NOT ACCEPTABLE CONDENSATE PIPING MAY BE TYPE M COPPER WITH CAPPED TEES AS CLEANOUTS. INSULATE CONDENSATE DRAIN PIPING BELOW ROOF TO 3/4 MIN. ARMAFLEX SHALL BE USED WITHIN 10 FT OF THE UNIT.
 6. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL A/C CONDENSATE DRAIN PIPING.
 7. AN APPROVED DIELECTRIC INSULATOR SHALL BE PROVIDED ON ALL DISSIMILAR METAL WATER PIPING CONNECTIONS OF WATER HEATERS AND RELATED WATER HEATING EQUIPMENT.
 8. WRAP ALL PIPING IN BLOCK WALLS OR WHEN PENETRATING CONCRETE WITH 10 MIL POLYVINYL TAPE, OR SLEEVE THE SECTION THROUGH THE FIRE WALL(S).
 9. CONTRACTOR SHALL FURNISH ANY MISCELLANEOUS ITEMS NEEDED, SPECIFICALLY MENTIONED OR NOT IN THIS DOCUMENT, TO PROVIDE A COMPLETE OPERATING SYSTEM.
 10. CONTRACTOR TO PROVIDE THREE (3) SETS OF OPERATION, MAINTENANCE AND WARRANTY LITERATURE IN A THREE RING BINDER TO THE OWNER.
 11. THE CONTRACTOR SHALL GUARANTEE ALL PARTS AND LABOR FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE 12. APPROVED CHANGES SHALL BE INCORPORATED INTO THE RECORD SET OF DRAWINGS
 13. INSULATION ALL PIPING ABOVE GRADE SHALL BE INSULATED FOR PROTECTION AGAINST FREEZING AND CONDENSATION. ALL INSULATION JOINTS SHALL BE NEATLY SEALED WITH TAPE AND LAGGING ADHESIVE.
 14. ALL VENTS THROUGH THE ROOF TO BE FLASHED W/ 4LB. LEAD SHEET EXTENDING 8" AROUND THE PIPE IN ALL DIRECTIONS. TURN LEAD SHEET DOWN 2" INTO PIPE
 15. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND INVERTS PRIOR TO STARTING PROJECT AND INSURE THE INDICATED PIPING SLOPE IS ADEQUATE HE SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
 16. VENT TERMINATION- EACH VENT SHALL TERMINATE NOT LESS THAN 10 FEET FROM OR AT LEAST (3) FEET ABOVE ANY PERMANENT WINDOW-DOOR OPENING AIR INTAKE OR VENT SHAFT NOR (3) FEET IN EVERY DIRECTION FROM ANY LOT LINE - ALLEY & STREET EXCEPTED.
 17. INSULATE ALL CONDENSATE DRAIN LINES NOT LOCATED IN THE INSULATED BUILDING ENVELOPE W/ 1/2 ARMAFLEX OR EQUAL. 18. TRAP PRIMERS AND/OR WATER HAMMER ARRESTORS SHALL BE LOCATED BEHIND ACCESS PANELS. ALL TRAP PRIMERS SHALL BE INSTALLED IN COMPLIANCE W/ PC 2009
 19. VERIFY ALL INSTALLATION OF ANY OPTIONAL EQUIPMENT WITH ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY PLUMBING WORK.
 20. ALL FLOOR SINKS SHALL BE ACCESSIBLE AND VISIBLE.
 21. BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE SUCH WALL SURFACES EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. NOTE: SOLDER AND FLUXES WITH A LEAD CONTENT WHICH EXCEEDS TWO (0.20) OF ONE (1) ARE PROHIBITED IN PIRING SYSTEMS USED TO CONVEY POTABLE WATER.
 22. WATER HEATERS WITH VERTICAL PIPE RISERS MUST HAVE HEAT TRAP ON BOTH INLET AND OUTLETS UNLESS THE WATER HEATER HAS INTEGRAL HEAT TRAP OR PART OF CIRCULATING SYSTEM. CIRCULATING HOT WATER SYSTEMS MUST HAVE AUTOMATIC OR MANUEL CONTROLS AND PIPES MUST BE INSULATED.

WATER CALCS			
TYPE OF FIXTURE...	# OF FIXTURE	FIXTURE UNIT...	TOTAL FIXTU...
BATHTUB OR COMBO BATH:SHWR.	- X	1.4 =	-
CLOSTHES WASHER	- X	1.4 =	-
DISHWASHER	- X	1.4 =	-
FULL BATH W/ BATHTUB	6 X	3.6 =	21.6
HALF BATH (POWDER ROOM)	- X	2.6 =	-
HOSE BIBB (INCLUDE 2 ONLY)	6 X	2.5 =	15.0
KITCHEN GROUP (SINK & WASHER)	1 X	2.5 =	2.5
KITCHEN SINK	- X	1.4 =	-
LAUNDRARY GROUP (WASHER &...)	2 X	2.5 =	5.0
LAUNDRY SINK	- X	1.4 =	-
LAVATORY	1 X	0.7 =	0.7
SHOWER STALL	1 X	1.4 =	1/4
WATER CLOSET (TANK TYPE)	- X	2.2 =	-
ICE MAKER	- X	0.7 =	-
BAR SINK	3 X	1.4 =	50.4
		TOTAL = 50.4	

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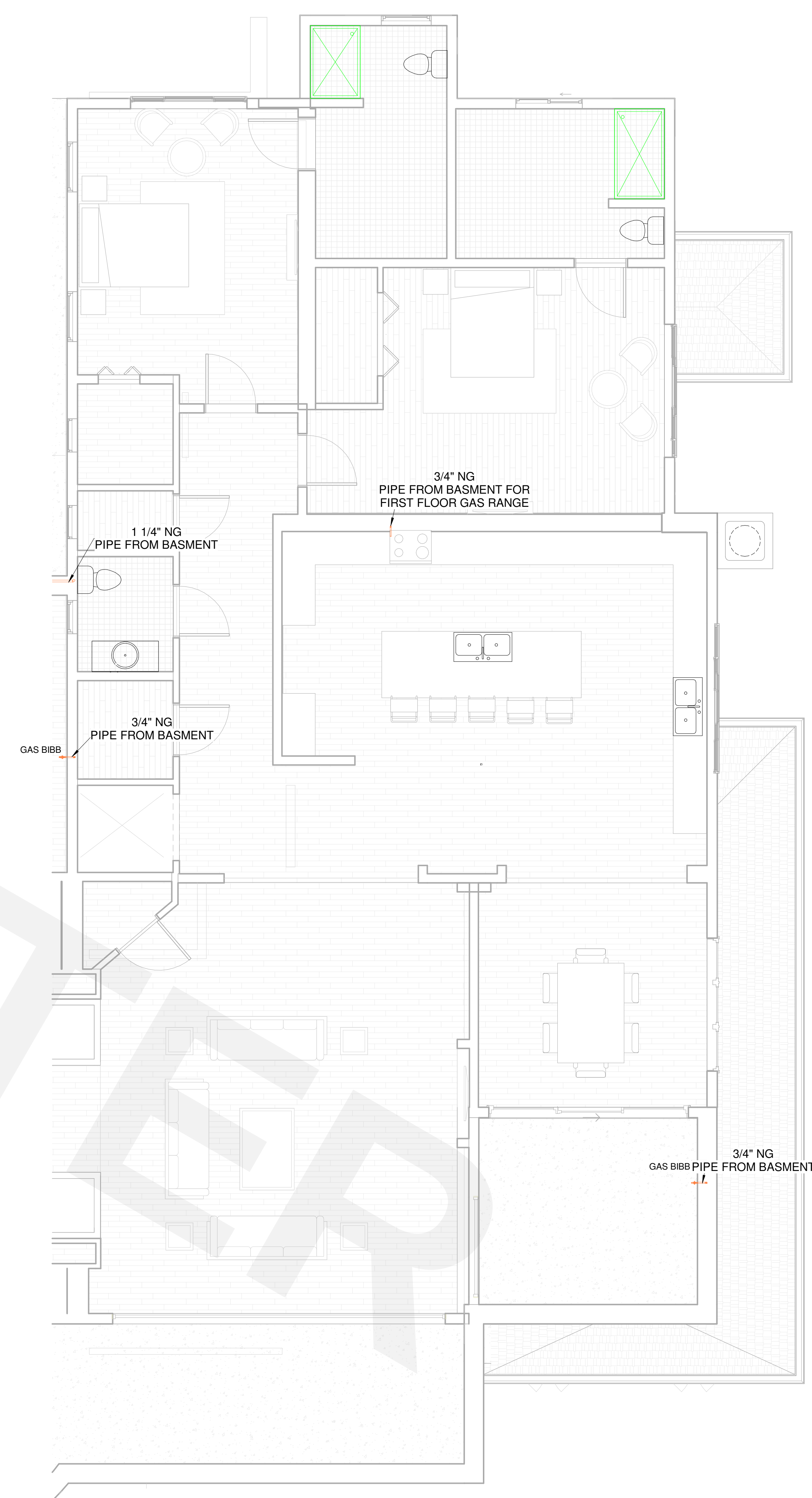
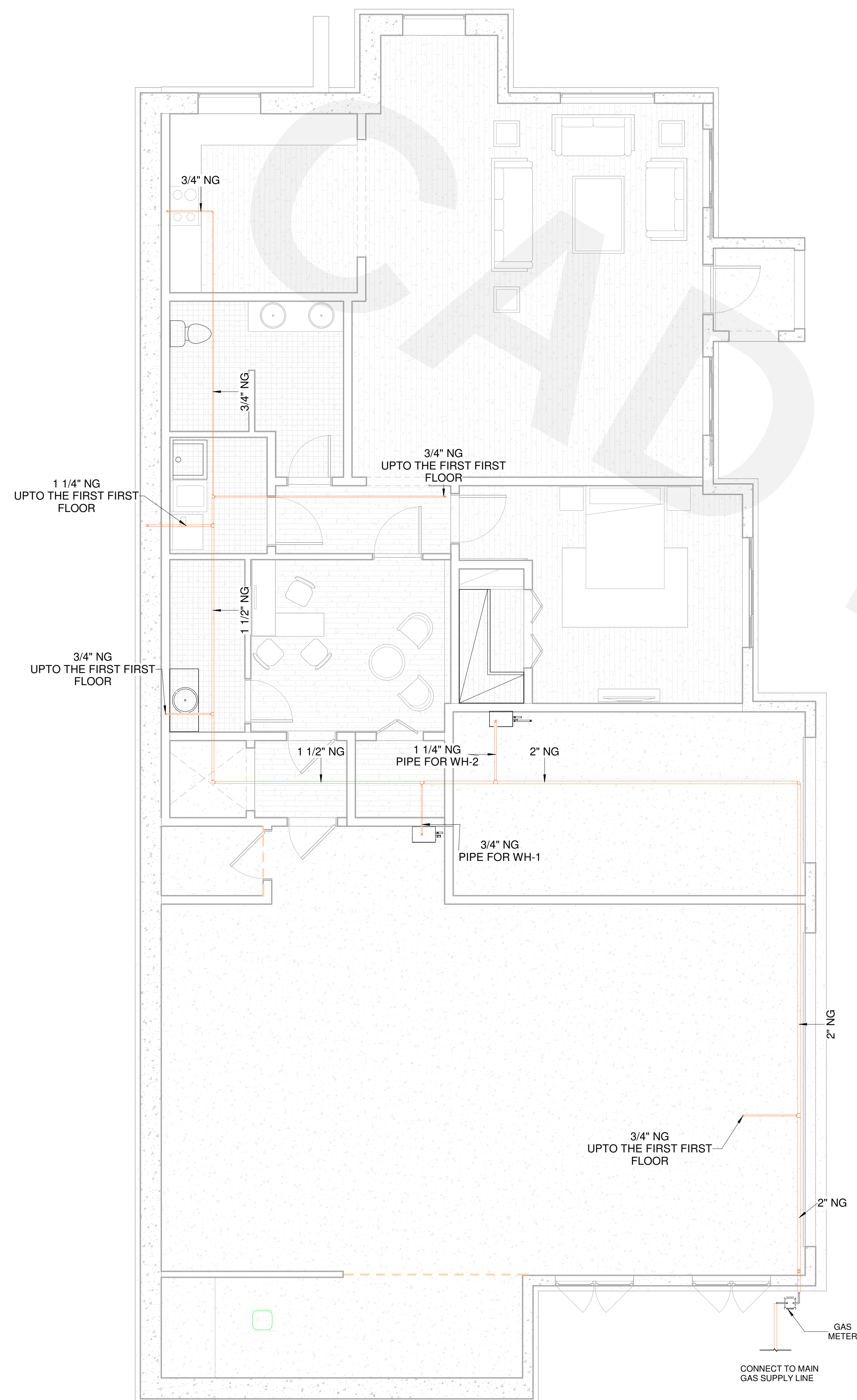
1 BASEMENT WATER SUPPLY

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

GEMTECH CORP.
7920 43rd Pl
Phoenix AZ 85042

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03/2026	
PROJECT TITLE:	
DUMBLING WATR SUPPLY PLAN	



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6110-02

DATE:
04/03/2026

SHEET TITLE:
PLUMBING GAS SUPPLY PLAN

SHEET NUMBER

THESE DRAWINGS AND SPECIFICATIONS ARE FOR THE PURPOSES OF CONSTRUCTION AND SHALL REMAIN THE PROPERTY OF AESOM INT. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE REPRODUCED OR USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS WITHOUT PERMISSION OF AESOM INT.
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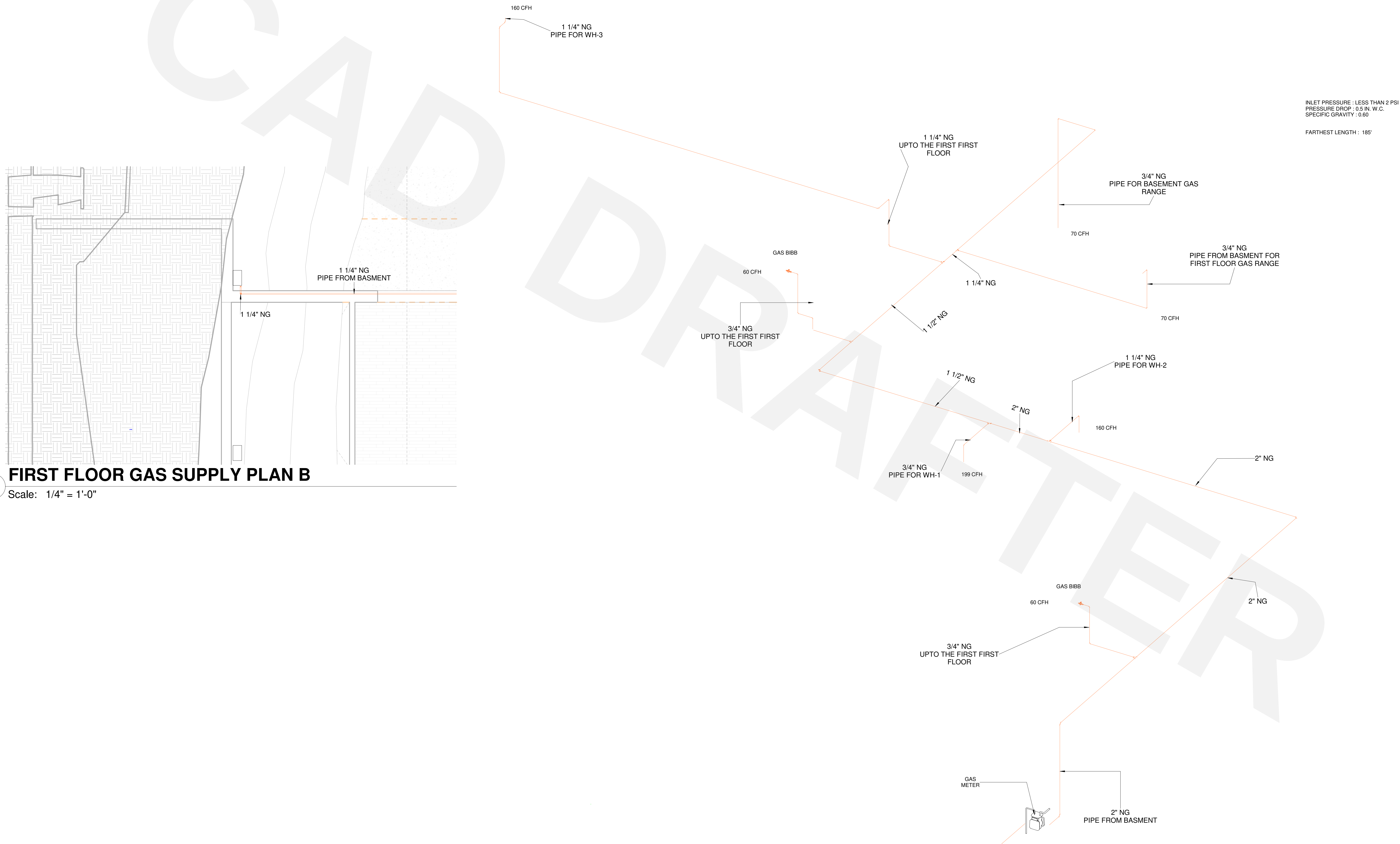
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FLUORINATING GAS SUPPLY PLAN

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106



1 FIRST FLOOR GAS SUPPLY PLAN B

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

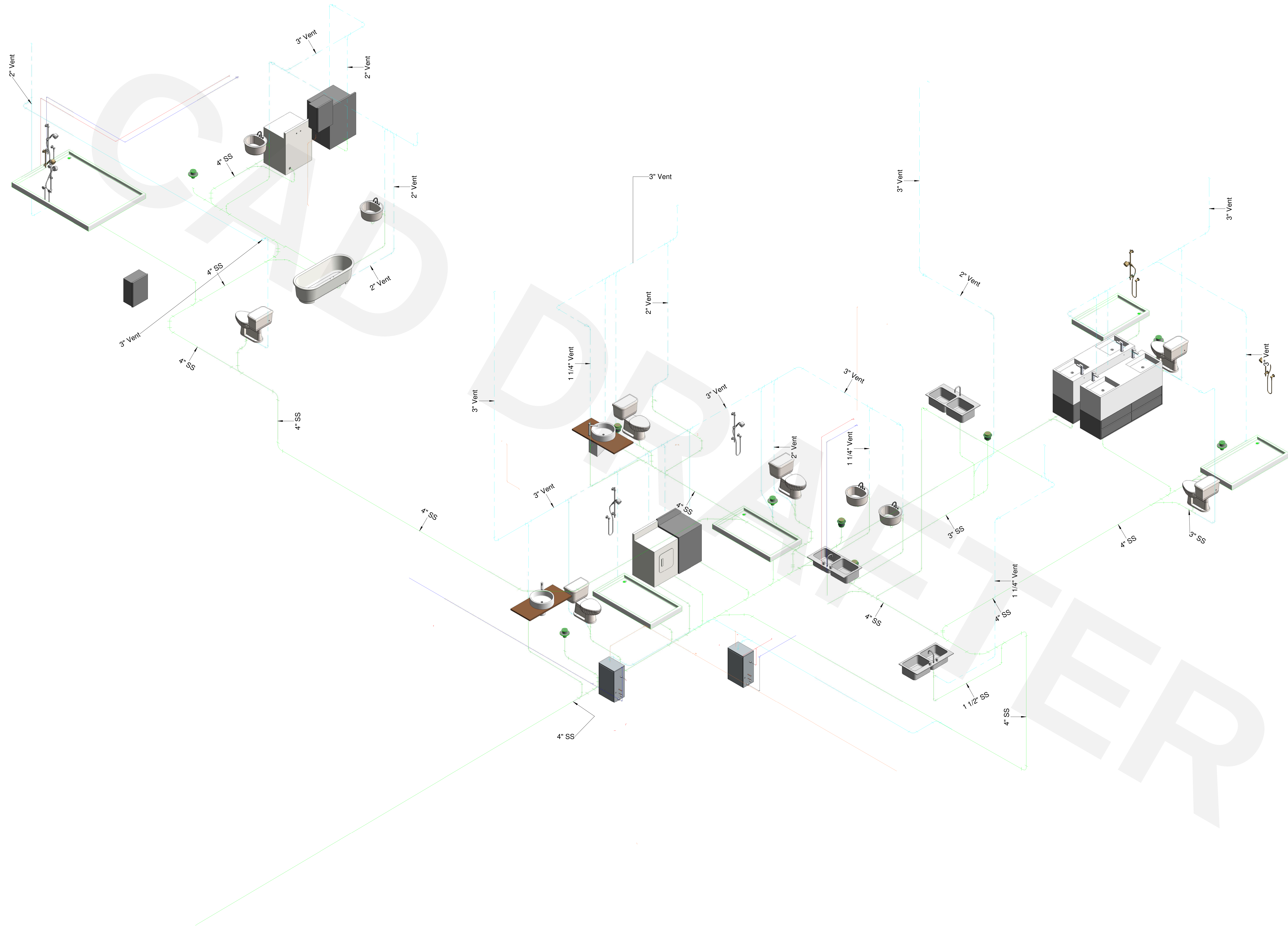
2 GAS SUPPLY ISOMETRIC

Scale:

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CONSTRUCTION SET	
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04/03/2026	
SHEET TITLE:	
SEWER / VENT SCHEMATIC	



SEWER / VENT ISOMETRIC

Scale:

- ELECTRICAL PLAN NOTES
1.

PROVIDE ONE (1) SWITCHED OUTLET @ ALL BEDROOMS AND DEN. FIXTURES, FITTINGS, BOXES, RECEPTACLES SWITCHES AND OTHER ELECTRICAL EQUIPMENT LOCATED IN DAMP OR WET LOCATIONS SHALL BE INSTALLED AS SUITABLE FOR SUCH LOCATIONS.
2.

ALL CEILING FANS TO BE PROVIDED WITH (2) SWITCHES. (1) SWITCH TO CONTROL OPERATION AND (1) SWITCH TO TURN LIGHT ON AND OFF. BOXES FOR CEILING FANS TO BE U.L. LISTED FOR FAN MOUNTING.
3.

RECEPTACLE OUTLETS IN BATHROOM, GARAGES, OR LOCATIONS WITHIN SIX FEET OF SINKS OR OUTDOORS SHALL BE PROTECTED BY A GROUND FAULT INTERRUPTING CIRCUIT. AT LEAST ONE GFCI RECEPTACLE SHALL BE INSTALLED IN THE BATHROOM ADJACENT TO EACH BASIN.
4.

A 125-VOLT 15-AMPERE RECEPTACLE SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION UNDER EACH BATHROOM LAVATORY AND KITCHEN SINK TO ALLOW FOR THE OPERATION OF A POINT-OF-SERVICE HOT WATER RECIRCULATING PUMP. ALL HOTWATER LINES SHALL BE COMPLETELY INSULATED WITH A MINIMUM OF R-4 INSULATION.
5.

A 125-VOLT, SINGLE PHASE 15 OR 20 AMPERE-RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITION, AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE HEATING, AIR CONDITIONING, AND REFRIGERATION EQUIPMENT. THE RECEPTACLE OUTLET SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE EQUIPMENT DISCONNECTING MEANS. (210.63)
6.

ALL RECEPTACLES ON KITCHEN COUNTERS 12" OR WIDER, NO POINT ALONG THE WALL SHALL BE MORE THAN 2' FROM A RECEPTACLE.
7.

ISLAND OR PENINSULA COUNTER TOPS 12" OR WIDER SHALL HAVE AT LEAST ONE RECEPTACLE FOR EACH 4 FEET OF COUNTERTOP.
8.

BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
9.

PROVIDE INTERCONNECTED SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE EACH SLEEPING ROOM, ON EACH STORY, IN THE HALL OR ADJACENT ROOM WHERE CEILING HEIGHT OF A ROOM OPEN TO THE HALL EXCEEDS THE HALL. SMOKE ALARMS SHALL INTERCONNECT IN SUCH MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS. SMOKE ALARMS SHALL BE PERMANENTLY HARD WIRED WITH BATTERY BACKUP.
10.

EXHAUST FANS PROVIDED AT LAUNDRY ROOM, BATHROOMS, AND TOILET ROOMS TO PROVIDE A MIN. FIVE (5) AIR CHANGES PER HOUR FOR THE ROOMS THEY ARE LOCATED.
11.

THE CLOTHES DRYER EXHAUST DUCT SHALL BE AT LEAST THE DIAMETER OF THE APPLIANCE OUTLET AND SHALL TERMINATE ON THE OUTSIDE OF THE BUILDING. IT SHALL NOT EXCEED 35' IN LENGTH WITH REDUCTIONS FOR BENDS. THE DUCT SHALL TERMINATE NOT LESS THAN 3 FEET FROM ANY PROPERTY LINE.
12.

CARBON MONOXIDE DETECTOR U.L. STANDARD 2034: INSTALL PER CONSUMER PRODUCT SAFETY COMMISSION (CPSC) AND MANUFACTURER WITHIN 15 FEET OF HEATING OR COOKING APPLIANCE OR NEAR VERY HUMID AREAS SUCH AS BATHROOMS.
13.

PROVIDE DISCONNECT MEANS AND ACCESS PANEL FOR SPA EQUIPMENT.
14.

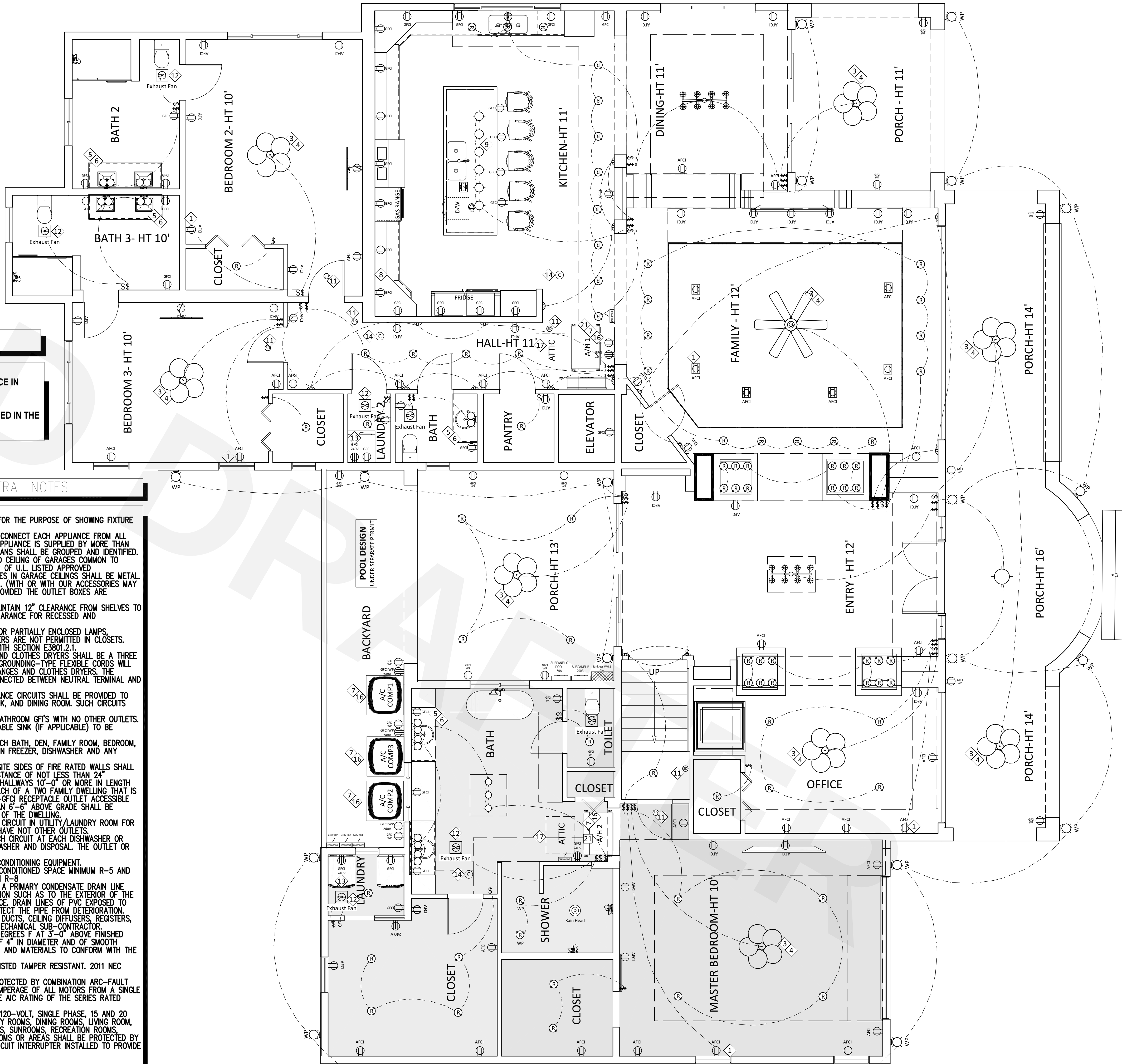
PROVIDE DISCONNECT MEANS TO W.H. HEATING/AC UNIT AND AIR HANDLERS.
15.

PROVIDE EGRESS LIGHTING SWITCH AT ATTIC ACCESS OPENING.
16.

IN AREAS SPECIFIED IN SECTION E3001.1.
17.

125-VOLT, 15- AND 20 AMPERE RECEPTACLES, SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

- ELEC. MECH. GENERAL NOTES
- DRAWINGS ARE DIAGRAMMATIC ONLY FOR THE PURPOSE OF SHOWING FIXTURE AND OUTLET LOCATIONS.
- A MEANS SHALL BE PROVIDED TO DISCONNECT EACH APPLIANCE FROM ALL UNDERGROUND CONDUCTORS. IF AN APPLIANCE IS SUPPLIED BY MORE THAN ONE SOURCE, THE DISCONNECTING MEANS SHALL BE GROUPED AND IDENTIFIED.
- ALL ELECTRICAL BOXES IN WALLS AND CEILING OF GARAGES COMMON TO LIVABLE SPACES TO BE OF METAL OR OF U.L. LISTED APPROVED FIRE-RESISTIVE PLASTIC. OUTLET BOXES IN GARAGE CEILINGS SHALL BE METAL.
- CEILING FANS NOT EXCEEDING 35 LBS. WITH OR WITH OUR ACCESSORIES MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE OUTLET BOXES ARE IDENTIFIED FOR SUCH USE.
- LIGHT FIXTURES IN CLOSETS MUST MAINTAIN 12" CLEARANCE FROM SHELVES TO INCANDESCENT FIXTURE WITH A6" CLEARANCE FOR RECESSED AND FLUORESCENT FIXTURES.
- INCANDESCENT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS, PENDANT FIXTURES, AND LAMP HOLDERS ARE NOT PERMITTED IN CLOSETS.
- OUTLET PLACEMENT SHALL COMPLY WITH SECTION E3001.2.1.
- RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS SHALL BE A THREE POLE WITH PRONG TYPE. FOUR WIRE GROUNDING-TYPE FLEXIBLE CORDS WILL BE REQUIRED FOR CONNECTION OF RANGES AND CLOTHES DRYERS. THE BONDING JUMPER SHALL NOT BE CONNECTED BETWEEN NEUTRAL TERMINAL AND THE FRAME OF THE APPLIANCE.
- TWO OR MORE 20 AMP SMALL APPLIANCE CIRCUITS SHALL BE PROVIDED TO SERVE THE KITCHEN, BREAKFAST NOOK, AND DINING ROOM. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.
- PROVIDE (1) 20 AMP CIRCUITS FOR BATHROOM GFI'S WITH NO OTHER OUTLETS. DISPOSAL SWITCH FOR ISLAND VEGETABLE SINK (IF APPLICABLE) TO BE LOCATED WITHIN CABINET.
- PROVIDED DEDICATED CIRCUITS TO EACH BATH, DEN, FAMILY ROOM, BEDROOM, LOFT, KITCHEN REFRIGERATOR, KITCHEN FREEZER, DISHWASHER AND ANY AREA/ITEM SPECIFIED BY OWNER.
- ELECTRICAL OUTLET BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24".
- RECEPTACLES MUST BE PROVIDED IN HALLWAYS 10'-0" OR MORE IN LENGTH.
- FOR A ONE FAMILY DWELLING AND EACH OF A TWO FAMILY DWELLING THAT IS AT GRADE LEVEL, AT LEAST ONE WP-GFCI RECEPTACLE OUTLET ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6'-6" ABOVE GRADE SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING.
- PROVIDE A SEPARATE 110V, 20 AMP. CIRCUIT IN UTILITY/LAUNDRY ROOM FOR WASHING MACHINE. THIS CIRCUIT TO HAVE NO OTHER OUTLETS.
- PROVIDE A SEPARATE 20 AMP BRANCH CIRCUIT AT EACH DISHWASHER OR DISPOSAL OR COMBINATION OF DISHWASHER AND DISPOSAL. THE OUTLET OR OUTLETS SHALL BE 20 AMP RATED.
- PROVIDE MINIMUM 12 SEER FOR AIR CONDITIONING EQUIPMENT.
- DUCT INSULATION WHEN LOCATED IN CONDITIONED SPACE MINIMUM R-5 AND OUTSIDE CONDITIONED SPACE MINIMUM R-8.
- MECHANICAL EQUIPMENT SHALL HAVE A PRIMARY CONDENSATE DRAIN LINE TERMINATING IN AN APPROVED LOCATION SUCH AS TO THE EXTERIOR OF THE BUILDING OR TO A LAVATORY TAILPIECE. DRAIN LINES OF PVC EXPOSED TO DAYLIGHT SHALL BE PAINTED TO PROTECT THE PIPE FROM DETEIORATION.
- HEAT PUMPS, AIR HANDLERS SUPPLY DUCTS, CEILING DIFFUSERS, REGISTERS, AND AIR RETURNS TO BE SIZED BY MECHANICAL SUB-CONTRACTOR.
- HEATING TO PROVIDE A MIN. OF 70 DEGREES F AT 3'-0" ABOVE FINISHED FLOOR DUCTS MUST BE A MINIMUM OF 4" IN DIAMETER AND OF SMOOTH INTERIOR SURFACE ALL WORKMANSHIP AND MATERIALS TO CONFORM WITH THE IRC.
- ALL 125 VOLT RECEPTACLES TO BE LISTED TAMPER RESISTANT. 2011 NEC ARTICLE 408.12
- ALL BEDROOM OUTLETS SHALL BE PROTECTED BY COMBINATION ARC-FAULT CIRCUIT INTERRUPTERS. THE TOTAL AMPERAGE OF ALL MOTORS FROM A SINGLE PANEL SHALL NOT EXCEED 1% OF THE AIC RATING OF THE SERIES RATED PANEL(S).
- ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOM, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.



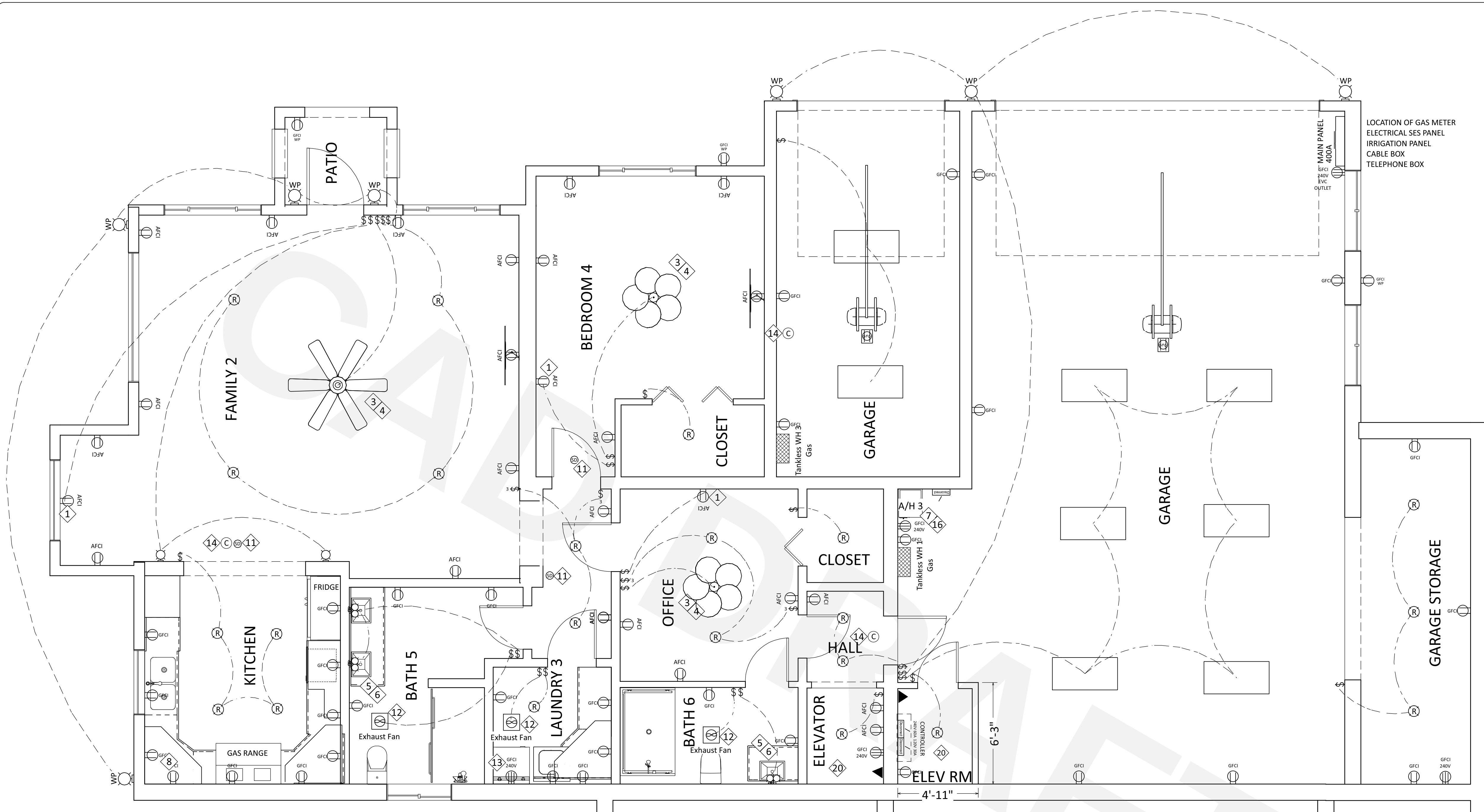
ATTIC MOUNTED AIR HANDLERS

21. AIR HANDLER DISCONNECTS SHALL HAVE A MINIMUM OF A 3 FT CLEARANCE IN FRONT OF THE DISCONNECTS

A SWITCHED LIGHT AND A 125V MAINTENANCE OUTLET SHALL BE INSTALLED IN THE AIR HANDLER ATTIC SPACE

MAIN & UPPER LEVEL

SCALE 1" = 4'



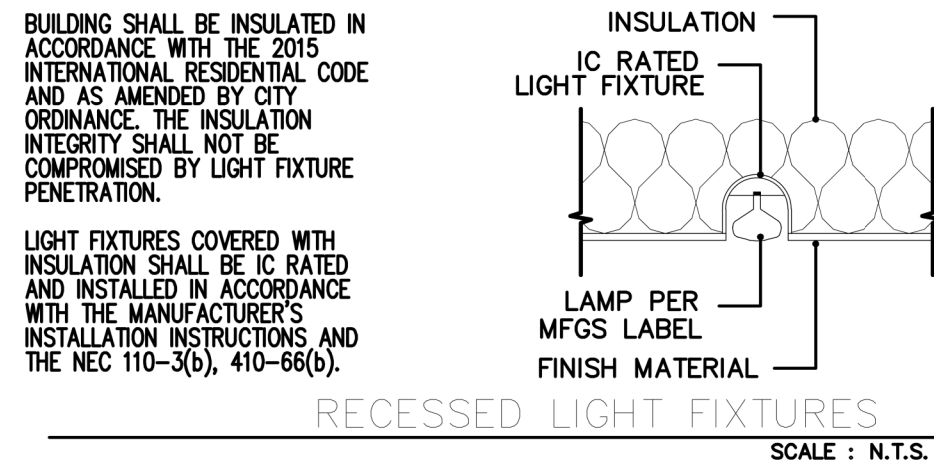
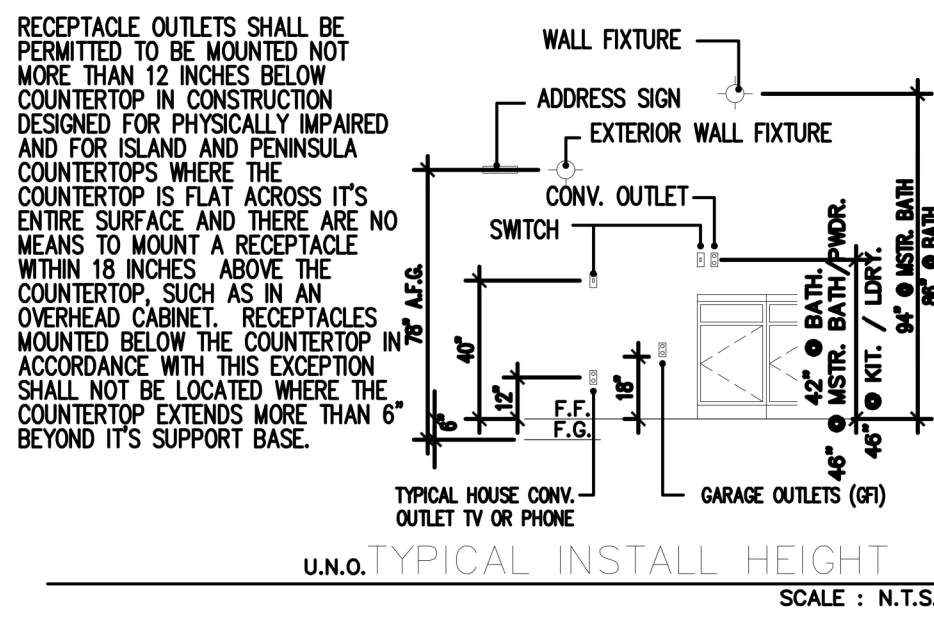
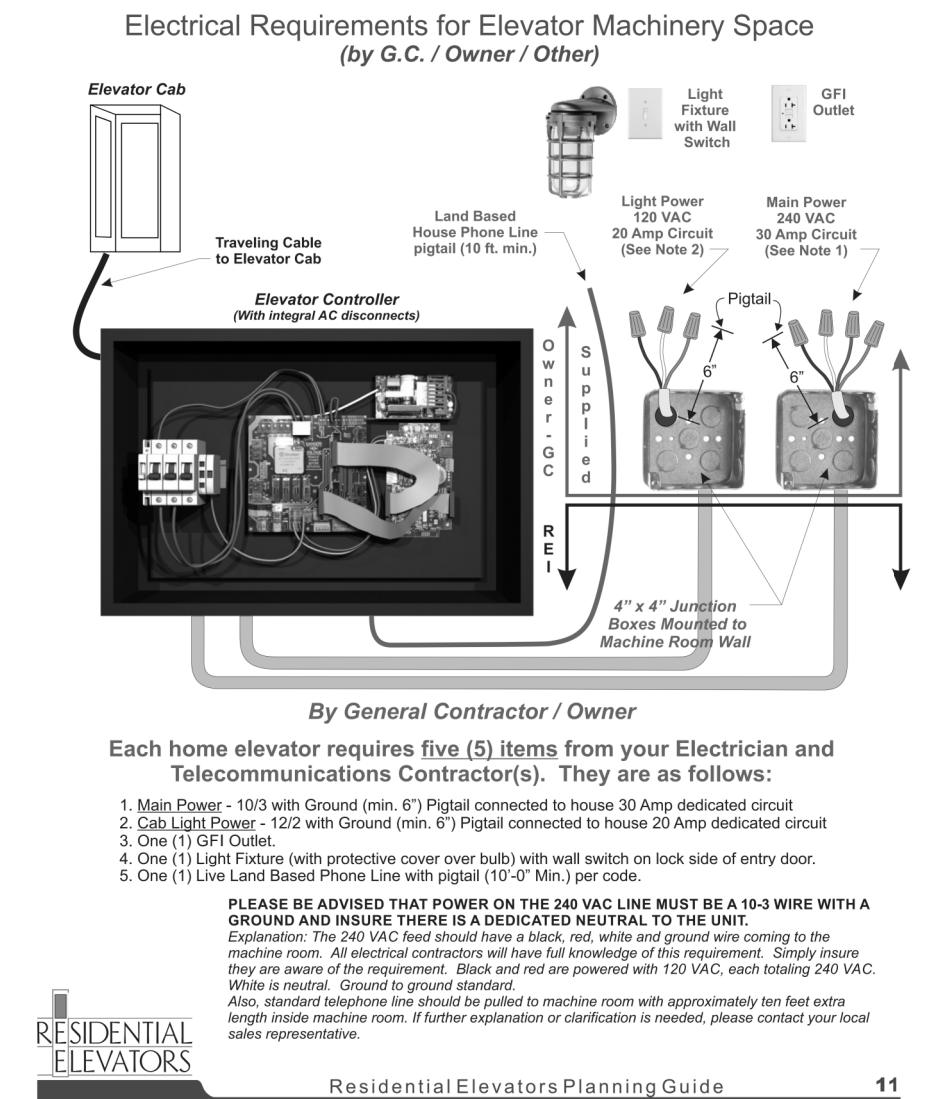
BASEMENT LEVEL
SCALE 1" = 3.5'



LEGEND			
	240V GFCI OUTLET		CHANDELIER CEILING LIGHT
	GFCI OUTLET		CEILING MOUNTED FLUORESCENT LIGHT
	ARC FAULT CIRCUIT INTERRUPTER OUTLET		VENTILATION EXHAUST
	FLUSH MOUNTED OUTLET		TANKLESS WATER HEATER
	SWITCH		HVAC AIR HANDLER FLOOR MOUNTED
	3-WAY SWITCH		HVAC AIR HANDLER ATTIC MOUNTED
	DISCONNECT SWITCH 60A FUSE PER MANUFACTURER		A/C CONDENSER
	RECESSED LIGHT		ATTIC ACCESS DOOR
	WALL-MOUNTED SCONCE LIGHT		
	WALL-MOUNTED VANITY LIGHT		
	110V SMOKE DETECTOR		
	CARBON MONOXIDE DETECTOR		
	TELEPHONE OUTLET		
	ELECTRICAL PANEL		GARAGE DOOR MOTOR ASSEMBLY

ELEVATOR

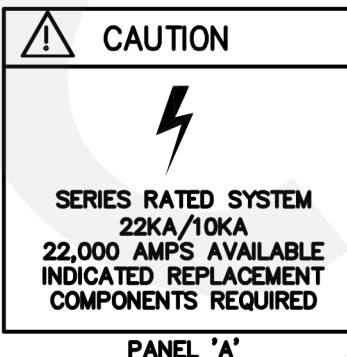
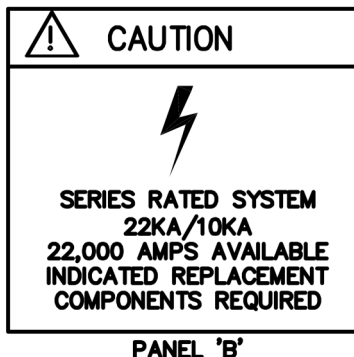
28. THE ELEVATOR ROOM HOUSES THE ELEVATOR MOTOR FUSIBLE DISCONNECTS AND CAR LIGHTING DISCONNECT WITH OCP. THIS ROOM SHALL HAVE A DEDICATED LIGHT AND DEDICATED GFCI PROTECTED RECEPTACLE. THE DISCONNECTS SHALL NOT BE LOCATED IN THE HOIST WAY. THE DISCONNECTS SHALL BE READILY ACCESSIBLE. THE CONTROL ROOM SHALL INCLUDE A 30-INCH MINIMUM WIDTH, A 6.5-FOOT HEAD HEIGHT, 3.5 FEET OF DEPTH, 90-DEGREE DOOR OPENING, AND DEDICATED SPACE FREE FROM OTHER PIPING OR EQUIPMENT. SEE 2017 NEC ARTICLE 620.2, ARTICLE 620.22, ARTICLE 620.23, ARTICLE 620.24, ARTICLE 620.25, ARTICLE 620.37, ARTICLE 620.51(C), ARTICLE 620.853.



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 - ALL ELECTRICAL BOXES IN WALLS AND CEILING OF GARAGES COMMON TO LIVABLE SPACES TO BE OF METAL OR OF U.L. LISTED APPROVED FIRE-RESISTING PLASTIC. OUTLET BOXES IN GARAGE CEILINGS SHALL BE METAL.
 - CEILING FANS NOT EXCEEDING 35 LBS. (WITH OR WITH OUR ACCESSORIES MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE OUTLET BOXES ARE IDENTIFIED FOR SUCH USE.
 - LIGHT FIXTURES IN CLOSETS MUST MAINTAIN 12" CLEARANCE FROM SHELVES TO INCANDESCENT FIXTURE WITH A6" CLEARANCE FOR RECESSED AND FLUORESCENT FIXTURES.
 - INCANDESCENT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS, PENDANT FIXTURES, AND LAMP HOLDERS ARE NOT PERMITTED IN CLOSETS.
 - OUTLET PLACEMENT SHALL COMPLY WITH SECTION E-801.2.1
 - RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS SHALL BE A THREE POLE WITH PRONG TYPE, FOUR WIRE GROUNDING-TYPE FLEXIBLE CORDS WILL BE REQUIRED FOR CONNECTION OF RANGES AND CLOTHES DRYERS. THE BONDING JUMPER SHALL NOT BE CONNECTED BETWEEN NEUTRAL TERMINAL AND THE FRAME OF THE APPLIANCE.
 - TWO OR MORE 20 AMP SMALL APPLIANCE CIRCUITS SHALL BE PROVIDED TO SERVE THE KITCHEN, BREAKFAST NOOK, AND DINING ROOM. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.
 - PROVIDE (1) 20 AMP CIRCUITS FOR BATHROOM GFI'S WITH NO OTHER OUTLETS.
 - DISPOSAL SWITCH FOR ISLAND VEGETABLE SINK (IF APPLICABLE) TO BE LOCATED WITHIN CABINET.
 - PROVIDE DEDICATED CIRCUITS TO EACH BATH, DEN, FAMILY ROOM, BEDROOM, LOFT, KITCHEN REFRIGERATOR, KITCHEN FREEZER, DISHWASHER AND ANY AREA/ITEM SPECIFIED BY OWNER.
 - ELECTRICAL OUTLET BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24"
 - RECEPTACLES MUST BE PROVIDED IN HALLWAYS 10'-0" OR MORE IN LENGTH FOR A ONE FAMILY DWELLING AND EACH OF TWO FAMILY DWELLING THAT IS AT GRADE LEVEL. AT LEAST ONE WP-GFI RECEPTACLE OUTLET ACCESSIBLE AT GRADE LEVEL AND NOT MORE THAN 6'-6" ABOVE GRADE SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING.
 - PROVIDE A SEPARATE 110V, 20 AMP. CIRCUIT IN UTILITY/LAUNDRY ROOM FOR WASHING MACHINE. THIS CIRCUIT TO HAVE NO OTHER OUTLETS.
 - PROVIDE A SEPARATE 20 AMP BRANCH CIRCUIT AT EACH DISHWASHER OR DISPOSAL OR COMBINATION OF DISHWASHER AND DISPOSAL. THE OUTLET OR OUTLETS SHALL BE 20 AMP RATED.
 - PROVIDE MINIMUM 12 SEER FOR AIR CONDITIONING EQUIPMENT.
 - DUCT INSULATION WHEN LOCATED IN CONDITIONED SPACE MINIMUM R-5 AND OUTSIDE CONDITIONED SPACE MINIMUM R-8
 - MECHANICAL EQUIPMENT SHALL HAVE A PRIMARY CONDENSATE DRAIN LINE TERMINATING IN AN APPROVED LOCATION SUCH AS TO THE EXTERIOR OF THE BUILDING OR TO A LAVATORY TAILPIECE. DRAIN LINES OF PVC EXPOSED TO DAYLIGHT SHALL BE PAINTED TO PROTECT THE PIPE FROM DETEIORATION.
 - HEAT PUMPS, AIR HANDLERS SUPPLY DUCTS, CEILING DIFFUSERS, REGISTERS, AND AIR RETURNS TO BE SIZED BY MECHANICAL SUB-CONTRACTOR.
 - HEATING TO PROVIDE A MIN. OF 70 DEGREES F AT 5'-0" ABOVE FINISHED FLOOR DUCTS MUST BE A MINIMUM OF 4" IN DIAMETER AND OF SMOOTH INTERIOR SURFACE. ALL WORKMANSHIP AND MATERIALS TO CONFORM WITH THE IRC.
 - ALL 125 VOLT RECEPTACLES TO BE LISTED TAMPER RESISTANT. 2011 NEC ARTICLE 408.12
 - ALL BEDROOM OUTLETS SHALL BE PROTECTED BY COMBINATION ARC-FAULT CIRCUIT INTERRUPTERS. THE TOTAL AMPERAGE OF ALL MOTORS FROM A SINGLE PANEL SHALL NOT EXCEED 1% OF THE AIC RATING OF THE SERIES RATED PANEL(S)
 - ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOM, PARLORS, LIBRARIES, DEN, BEDROOMS, SLEEPING, RECREATION ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.

SERVICE EQUIPMENT RATING INFO

- THIS ELECTRICAL SYSTEM SHALL BE A UL LISTED SERIES RATED FUSE CIRCUIT BREAKER-CIRCUIT BREAKER COMBINATION.
- PUBLISHED AVAILABLE FAULT CURRENT FROM SERVING UTILITY = 22,000 AMPERES.
- MOTOR F.L.A. CONTRIBUTION DOES NOT EXCEED 1% OF THE INTERRUPT RATING OF DOWN STREAM A.I.C. SERIES RATED DEVICE. WORST CASE DOWN STREAM A.I.C. RATING =10,000 AMPS. WORST CASE TOTAL MOTOR FULL LOAD AMPS. =80 AMPS.
- NO DESIGN CHANGES MAY BE MADE TO THIS SYSTEM WITHOUT APPROVAL OF THE AUTHORITY HAVING JURISDICTION. THIS SYSTEM SHALL BE INSTALLED EXACTLY AS INDICATED ON THESE PLANS. PROVIDED LABEL FOR EACH SERIES FULLY PANELBOARD AS INDICATED BELOW IN ACCORDANCE WITH NEC#110-22. PERMISSABLE SUBSTITUTION OF A FULLY RATED CIRCUIT BREAKER SYSTEM IS ALLOWABLE PROVIDED THE PANELBOARD AND CIRCUIT BREAKER AIC RATING IS GREATER THAN AVAILABLE FAULT CURRENT AS INDICATED THIS SHEET AND LABLED AS A FULLY RATED SYSTEM.



ONE LINE GENERAL NOTES

- THE GENERAL/ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS TO FULLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO BID. NO ADDITIONAL CONSIDERATIONS WILL BE ALLOWED AFTER BID.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING SWITCH, FUSE, CONDUCTOR, CIRCUIT BREAKER SIZES, ETC. FOR CODE COMPLIANCE. NOTIFY ENGINEER OF ANY AND ALL DISCREPANCIES PRIOR TO HIS BID.
- GFP MUST BE ON-SITE TESTED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. ELECTRICAL CONTRACTOR SHALL PROVIDED COPY OF MANUFACTURER'S INSTRUCTIONS AND TEST RESULTS TO AUTHORITY HAVING JURISDICTION.
- ALL EQUIPMENT RATED 8000 AMPS OR MORE SHALL BE TESTED IN CONFORMANCE WITH UL STANDARD 869 OR 891 FOR INSULATION BREAKDOWN PRIOR TO IST BEING ENERGIZED. THIS TEST SHALL BE PERFORMED BY A TESTING FACILITY APPROVED BY THE BUILDING OFFICIAL.
- SERVICE ENTRANCE SECTION SHALL BE MARKED IN ACCORDANCE WITH NEC ARTICLE 110-16 FOR FLASH PROTECTION HAZARDS. (REFERENCE NFPA 70E-2000 AND ANSI Z535.4-1998)

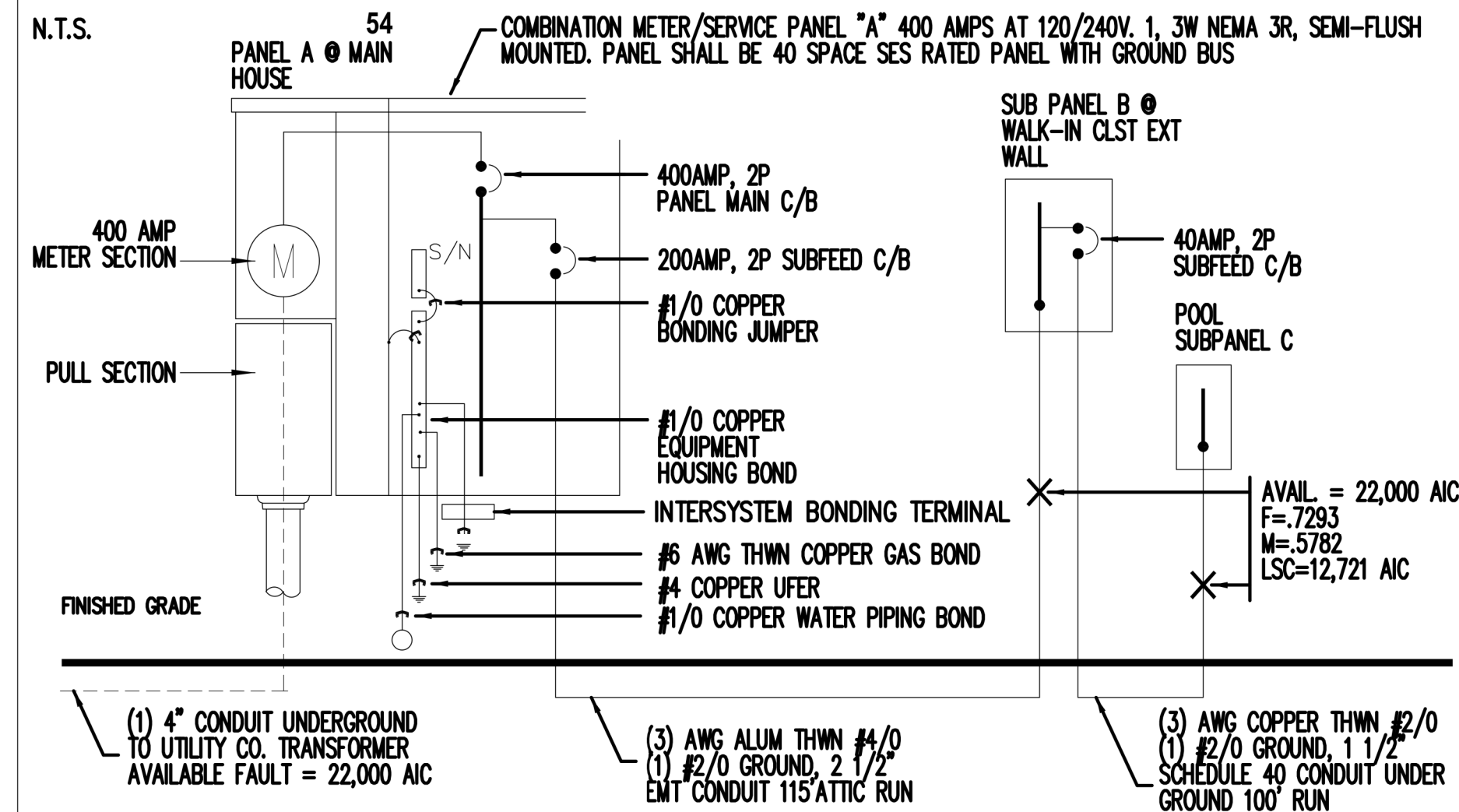
GROUND NOTES

ALL INTERIOR METALLIC WATER PIPING WHICH MAY BECOME ENERGIZED SHALL BE BONDED TOGETHER AND MADE ELECTRICALLY CONTINUOUS. A BOND OF BARE #4 COPPER WIRE SHALL BE MADE BETWEEN THE GROUNDED PIPING SYSTEM AND THE ELECTRODE CONDUCTOR.

20'-0" MINIMUM BARE WIRE CONDUCTOR (#4 MIN.) ENCASED BY 2" MIN. OF CONCRETE AT THE BOTTOM OF A FOOTING WHICH IS IN DIRECT CONTACT WITH THE ADJACENT EARTH.

THE INTERIOR METAL COLD WATER PIPING SYSTEM IS TO BE BONDED TO THE SERVICE EQUIPMENT ENCLOSURE THE GROUNDING ELECTRODE OR TO ONE OR MORE GROUND ELECTRODES USED.

400 AMP SINGLE LINE DIAGRAM



MAIN PANEL A LOAD CALCULATIONS

GENERAL LIGHTING LOAD - 6000 SQ FT X 3 W = 18,000				FIRST 10KW @ 100%	10000
ITEM	QUANTITY	VA	TOTAL VA	REMAINDER @ 40%	23932
ELEVATOR	1	7200	7200	AH3	2000
GAS TANKLESS WATER HEATERS	2	2500	5000	POOL SUBPANEL C	9600
EV CHARGER	1	7680	7680	TOTAL	45532
BATH/LAUNDRY FANS	7	50	350		
DISHWASHER	2	1200	2400	45532 / 240V =	190 AMPS
DISPOSAL	2	600	1200		
GARAGE DOOR OPENERS	2	300	600		
RANGE HOOD	2	300	600		
REFRIGERATOR	2	900	1800		
GAS COOKTOP	2	600	1200		
MICROWAVE	2	900	1800		
LAUNDRY CIRCUIT	2	1500	3000		
DRYER	2	5000	10000		
LANDSCAPE LIGHTING	1	1500	1500		
SMALL APPLIANCE CIRCUITS	5	1500	7500		
SUBTOTAL			51830		
TOTAL			69830		

SUBPANEL B LOAD CALCULATIONS

GENERAL LIGHTING LOAD - 2500 SQ FT X 3 W = 7500				FIRST 10KW @ 100%	10000
ITEM	QUANTITY	VA	TOTAL VA	REMAINDER @ 40%	4460
GAS TANKLESS WATER HEATERS	1	2500	2500	AC1/AC2/AC3/AH1/AH2	30000
BATH/LAUNDRY FANS	3	50	150		
SMALL APPLIANCE CIRCUITS	3	1500	4500	TOTAL	44460
LAUNDRY CIRCUIT	1	1500	1500		
DRYER	1	5000	5000	41260 / 240V =	185 AMPS
SUBTOTAL			13650		
TOTAL			21150		

POOL SUBPANEL C LOAD CALCULATIONS

				TOTAL	9600
ITEM	QUANTITY	VA	TOTAL VA		
POOL EQUIPMENT	1	9600	9600		
TOTAL			9600	9600 / 240	40 AMPS

MAIN PANEL

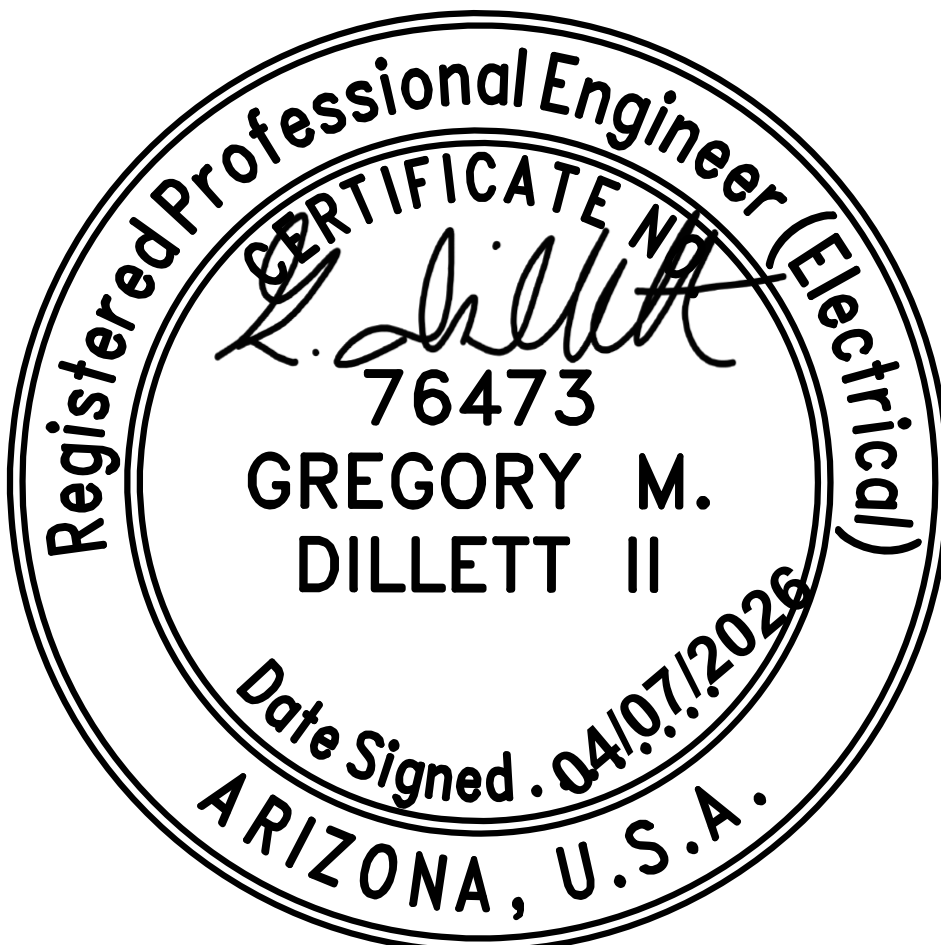
LOCATION - GARAGE					PANEL - 400A - 120V/240V				
NO	USAGE	POLES	BREAKER	WIRE	USAGE	POLES	BREAKER	WIRE	NO
1	ELEVATOR	2	30	10/3 CU	DRYER - MAIN	2	30	10/3 CU	2
3									4
5									6
7	DRYER - BASEMENT	2	30	10/3 CU	STOVE - MAIN	2	30	10/3 CU	8
9	STOVE - BASEMENT	2	30	10/3 CU	AFCI - LIVING ROOM	1	20	12/2 CU	10
11					AFCI - BEDROOMS - MAIN				12
13					AFCI - MAIN				14
15	EV CHARGER - BASEMENT	2	60	4/3 CU	AFCI - MAIN	1	20	12/2 CU	16
17	ELEVATOR - CAB LIGHT	1	20	12/2 CU	AFCI - MAIN	1	20	12/2 CU	18
19	ELEVATOR - GFCI	1	20	12/2 CU	GFCI - KITCHEN - MAIN	1	20	12/2 CU	20
21	GFCI - GARAGE	1	20	12/2 CU	GFCI - KITCHEN - MAIN	1	20	12/2 CU	22
23	GARAGE DOOR OPENER	1	20	12/2 CU	GFCI - BATHROOMS - MAIN	1	20	12/2 CU	24
25	GARAGE DOOR OPENER	1	20	12/2 CU	FRIDGE - MAIN	1	20	12/2 CU	26
27	GFCI - BASEMENT	1	20	12/2 CU	MICROWAVE - MAIN	1	20	12/2 CU	28
29	GFCI - BASEMENT KITCHEN	1	20	12/2 CU	GARBAGE DISP - MAIN	1	20	12/2 CU	30
31	AFCI - BASEMENT	1	20	12/2 CU	DISHWASHER - MAIN	1	20	12/2 CU	32
33	AFCI - BASEMENT	1	20	12/2 CU	LIGHTING - MAIN	1	20	12/2 CU	34
35	LIGHTING - BASEMENT	1	20	12/2 CU	LIGHTING - MAIN	1	20	12/2 CU	36
37	LIGHTING - BASEMENT	1	20	12/2 CU	LIGHTING - MAIN	1	20	12/2 CU	38
39	FRIDGE - BASEMENT	1	20	12/2 CU	LIGHTING - MAIN	1	20	12/2 CU	40
41	MICROWAVE - BASEMENT	1	20	12/2 CU	LANDSCAPE LIGHTING	1	20	12/2 CU	42
43	GARBAGE DISP - BASEMENT	1	20	12/2 CU	WASHER - MAIN	1	20	12/2 CU	44
45	DISHWASHER - BASEMENT	1	20	12/2 CU	GAS TANKLESS W HEATER	1	20	12/2 CU	46
47	LANDSCAPE LIGHTING	1	20	12/2 CU					48
49	A/H 3	1	20	12/2 CU	200A SUBPANEL B	2	200	4/0/3 CU	50
51	WASHER - BASEMENT	1	20	12/2 CU					52
53	GAS TANKLESS W HEATER	1	20	12/2 CU	POOL SUBPANEL C	2	50	6/3 CU	54

SUB-PANEL B

LOCATION - REAR PATIO					PANEL - 200A - 120V/240V				
NO	USAGE	POLES	BREAKER	WIRE	USAGE	POLES	BREAKER	WIRE	NO
1	A/C 1	2	50	6/3 CU	A/C 2	2	30	10/3 CU	2
3									4
5									6
7	A/C 3	2	30	10/3 CU	DRYER - 2ND FLR	2	30	10/3 CU	8
9	A/H 1	1	20	12/2 CU	A/H 2	1	20	12/2 CU	10
11	GAS TANKLESS W HEATER	1	20	12/2 CU	WASHER - 2ND FLR	1	20	12/2 CU	12
13	GFCI - EXTERIOR	1	20	12/2 CU	AFCI - BEDROOM - 2ND FLR	1	20	12/2 CU	14
15	AFCI - MAIN	1	20	12/2 CU	AFCI - 2ND FLR	1	20	12/2 CU	16
17	AFCI - MAIN	1	20	12/2 CU	GFCI - BATHROOM - 2ND FLR	1	20	12/2 CU	18
19	LIGHTING - MAIN	1	20	12/2 CU	LIGHTING - 2ND FLR	1	20	12/2 CU	20
21	LIGHTING - MAIN	1	20	12/2 CU	LIGHTING - 2ND FLR	1	20	12/2 CU	22
23	LIGHTING - EXTERIOR	1	20	12/2 CU	EXHAUST FANS	1	20	12/2 CU	24
25	LIGHTING - EXTERIOR	1	20	12/2 CU	SPARE				26
27	SPARE				SPARE				28
29	SPARE				SPARE				30

POOL SUB-PANEL C

LOCATION - REAR PATIO					PANEL - 50A - 120V/240V				
NO	USAGE	POLES	BREAKER	WIRE	USAGE	POLES	BREAKER	WIRE	NO
1	POOL EQUIPMENT	1	15	12/2 CU	SPARE				2
3	POOL EQUIPMENT	1	15	12/2 CU	SPARE				4
5	LIGHTING	1	20	12/2 CU	SPARE				6
7	SPARE				SPARE				8



SHEET NUMBER

E103

SCALE @ 24" X 36"

DATE:

DRAWN BY: D All

ELECTRICAL PLAN

7920 43rd Pl, Phoenix, AZ 85042

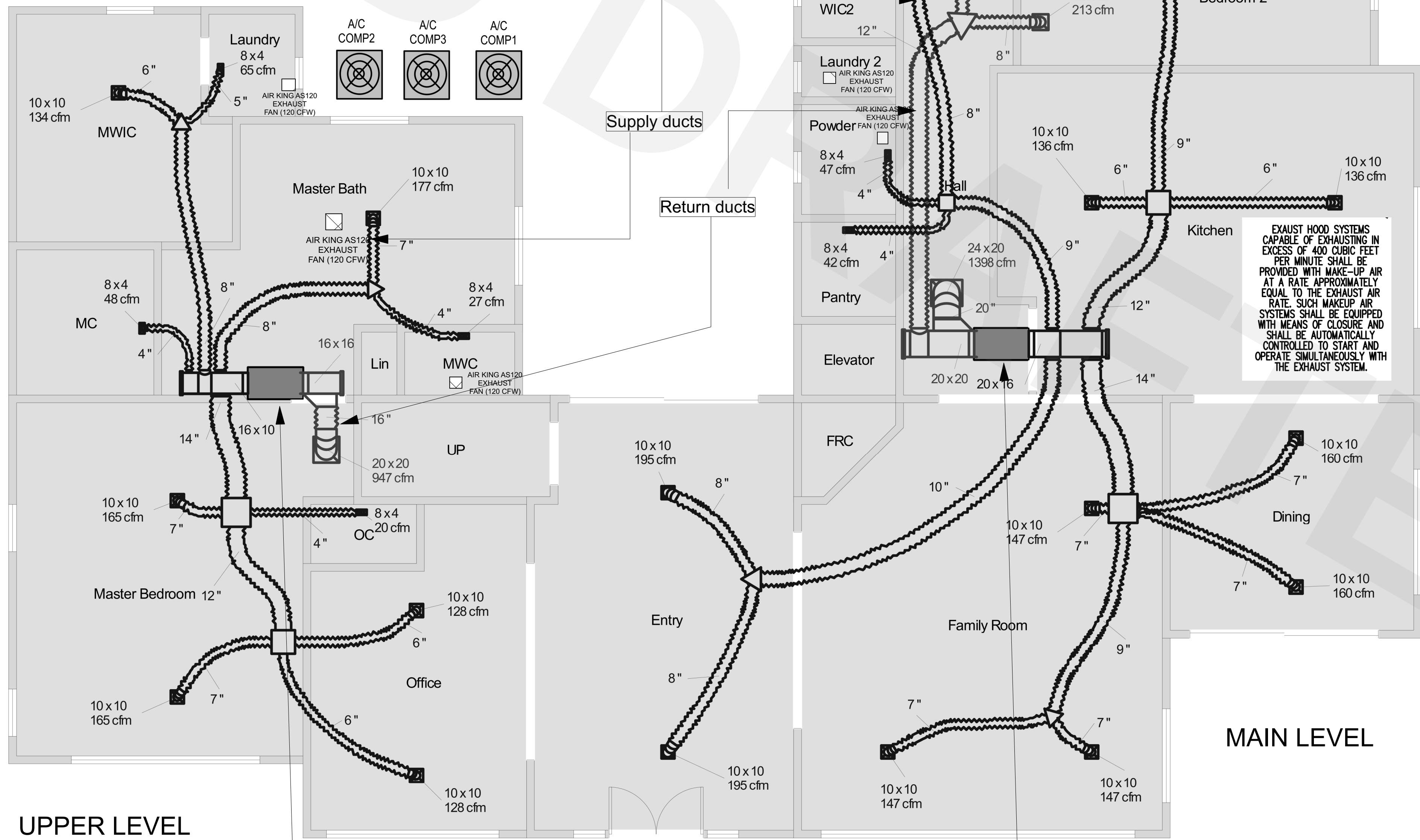
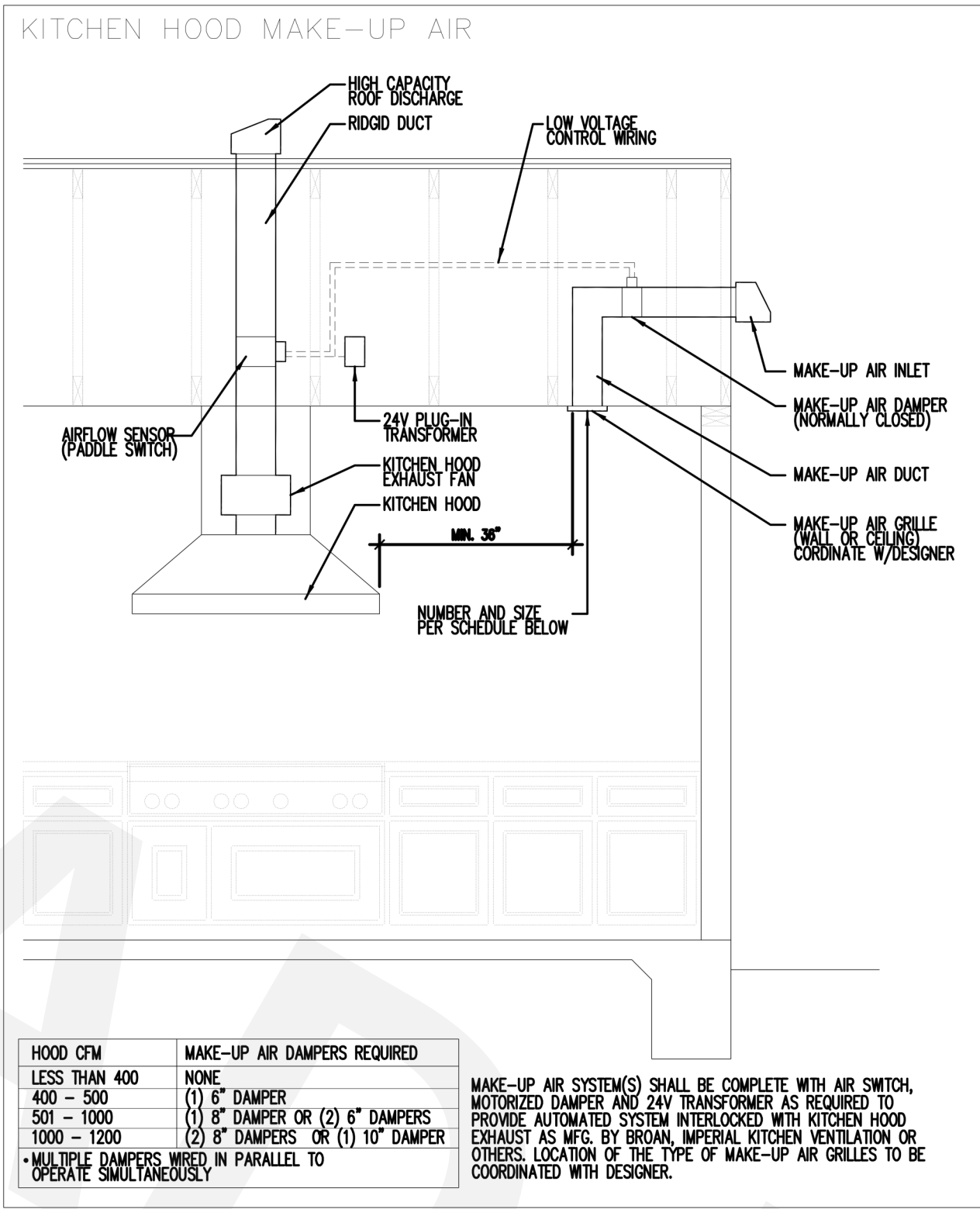
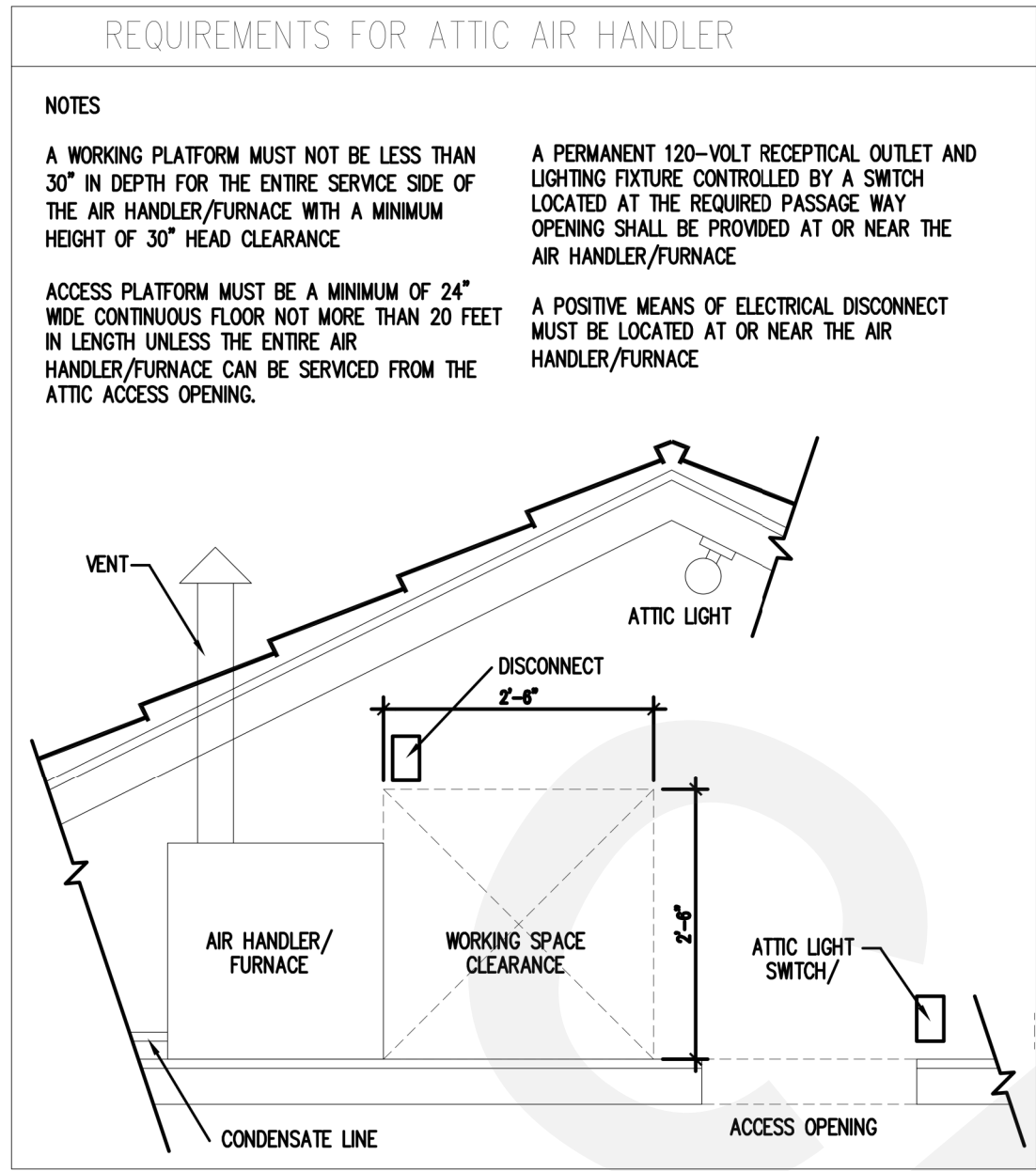
APN: 301-18-041

Legacy Mountain Hillside

CAD DRAFTER

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San Diego, CA 92110
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CAD DRAFTER



UPPER LEVEL

MAIN LEVEL

Above ceiling
Electric A/H 2
28,400 BTU

Above ceiling
Electric A/H 1
58,000 BTU

A/C1 - A/H 1

HEATING EQUIPMENT				COOLING EQUIPMENT			
Make	Goodman Mfg.			Make	Goodman Mfg.		
Trade	GOODMAN			Trade	GOODMAN		
Model	GSZH506010A			Cond	GSZH506010A		
AHRI ref	208509802			Coil	AMST60DU1400A		
				AHRI ref	208509802		
Efficiency	7.8 HSPF2			Efficiency	12.0 EER2,15.2 SEER2		
Heating input	57000 Btuh @ 47°F			Sensible cooling	44635 Btuh		
Heating output	29 °F			Latent cooling	11865 Btuh		
Temperature rise	1883 cfm			Total cooling	56500 Btuh		
Actual air flow	0.082 cfm/Btuh			Actual air flow	1883 cfm		
Air flow factor	0.60 in H2O			Air flow factor	0.050 cfm/Btuh		
Static pressure				Static pressure	0.60 in H2O		
Space thermostat				Load sensible heat ratio	0.84		
Capacity balance point	= 20 °F						
Backup: Goodman Heat Strip							
Input = 10 kW, Output = 34121 Btuh, 100 AFUE							
ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)		
Entry	462	4733	5875	390	294		
FRC	31	0	0	0	0		
Family Room	621	5174	8821	426	442		
Elevator	33	0	0	0	0		
Pantry	42	505	473	42	24		
Powder	49	536	929	44	47		
Laundry 2	24	0	0	0	0		
WIC2	41	409	745	34	37		
Bedroom 3	254	2151	3573	177	179		
Bath 3	143	917	1108	76	55		
Bath 2	133	1066	1323	66	66		
C2	42	58	4	4	3		
Bedroom 2	311	1447	2877	119	144		
Hall	192	0	0	0	0		
Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.							

A/C2 - A/H 2

HEATING EQUIPMENT				COOLING EQUIPMENT			
Make	Goodman Mfg.			Make	Goodman Mfg.		
Trade	GOODMAN			Trade	GOODMAN		
Model	GSZH503010A			Cond	GSZH503010A		
AHRI ref	213368057			Coil	AMST30BU1400B		
				AHRI ref	213368057		
Efficiency	7.8 HSPF2			Efficiency	12.5 EER2,15.2 SEER2		
Heating input				Sensible cooling	22436 Btuh		
Heating output	28400	Btuh @ 47°F		Latent cooling	5964 Btuh		
Temperature rise	28	°F		Total cooling	28400 Btuh		
Actual air flow	947	cfm		Actual air flow	947 cfm		
Air flow factor	0.081	cfm/Btuh		Air flow factor	0.053 cfm/Btuh		
Static pressure	0.60	in H2O		Static pressure	0.60 in H2O		
Space thermostat				Load sensible heat ratio	0.84		
Capacity balance point = 23 °F							
Backup: Goodman Heat Strip							
Input = 8 kW, Output = 27297 Btuh, 100 AFUE							
ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)		
Elev2	36	0	0	0	0		0
E Entry	30	900	536	72	28		28
OC2	31	0	0	0	0		0
Bath6	87	793	106	64	6		6
Office2	147	360	1601	29	84		84
Laundry3	66	443	680	36	36		36
C4	54	236	373	19	20		20
B Hall	58	0	0	0	0		0
Bedroom 4	231	1988	2539	160	133		133
Bath 5	136	586	1155	47	61		61
B Kitchen	182	1803	3678	145	193		193
Family 2	621	4648	7367	374	387		387
Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.							

A/C3 - A/H 3

HEATING EQUIPMENT				COOLING EQUIPMENT			
Make	Goodman Mfg.	Make	Goodman Mfg.	Trade	GOODMAN	Trade	GOODMAN
Model	GSZH503010A	Cond	GSZH503010A	Coil	AMST30BU1400B	AHRI ref	213368057
AHRI ref	213368057	AHRI ref	213368057	Efficiency	12.5 EER2,15.2 SEER2	Sensible cooling	22436 Btuh
Efficiency	7.8 HSPF2	Efficiency	12.5 EER2,15.2 SEER2	Latent cooling	5964 Btuh	Total cooling	28400 Btuh
Heating input	28400 Btuh @ 47°F	Latent cooling	5964 Btuh	Actual air flow	947 cfm	Air flow factor	0.052 cfm/Btuh
Heating output	28 °F	Total cooling	28400 Btuh	Static pressure	0.60 in H2O	Load sensible heat ratio	0.87
Temperature rise	947 cfm	Actual air flow	947 cfm	Space thermostat			
Actual air flow	0.068 cfm/Btuh	Air flow factor	0.052 cfm/Btuh	Capacity balance point = 28 °F			
Air flow factor	0.60 in H2O	Static pressure	0.60 in H2O				
Static pressure		Load sensible heat ratio	0.87				
Space thermostat							
Capacity balance point = 28 °F							
Backup: Goodman Heat Strip							
Input = 8 kW, Output = 27297 Btuh, 100 AFUE							
ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)		
MWIC	200	1987	1228	134	64		
Laundry	42	964	1250	65	65		
MC	90	709	397	48	21		
Master Bath	322	2618	3222	177	168		
Lin	12	0	0	0	0		
MWC	34	398	447	27	23		
Master Bedroom	452	4486	6335	304	330		
Office	272	2756	4911	186	256		
OC	31	76	391	5	20		
UP	81	0	0	0	0		
Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.							

MECHANICAL PLAN

7920 43rd Pl, Phoenix, AZ 85042
APN: 301-18-041
Legacy Mountain Hillside

CAD DRAFTER

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CAD DRAFTER

SHEET NUMBER
M101
SCALE @ 24" X 36"
DATE:
DRAWN BY: DAI

MECH. GENERAL NOTES

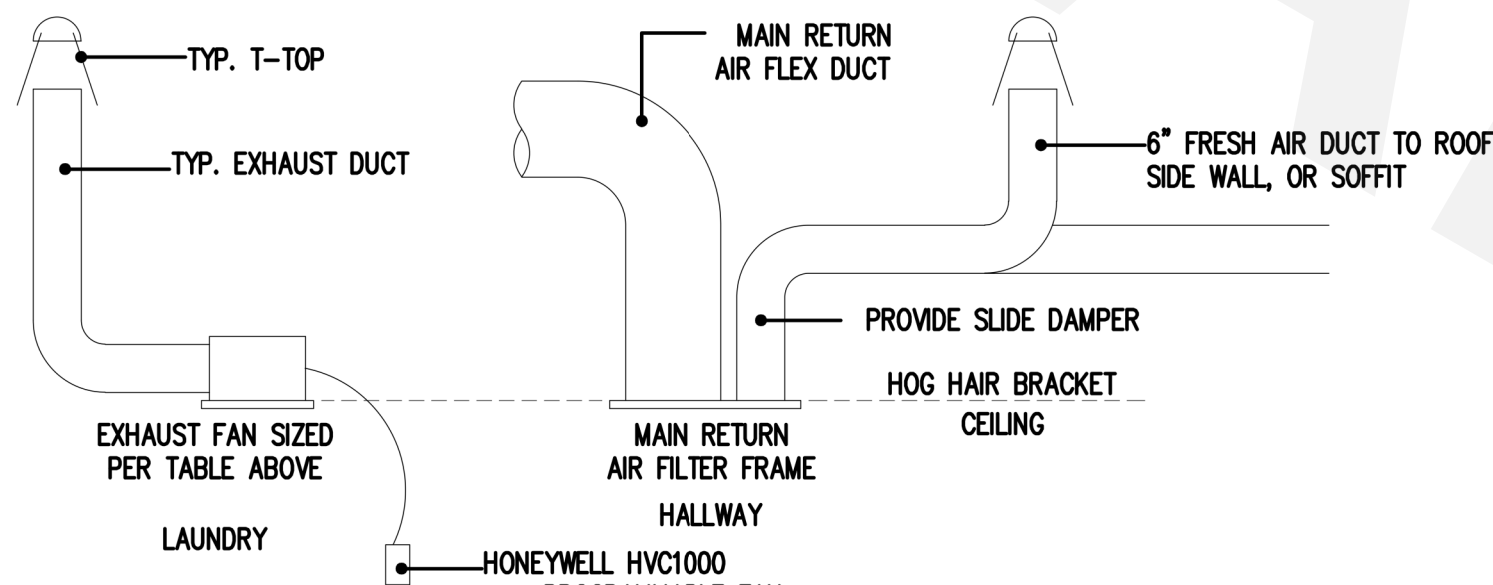
- SUPPLY DUCTS IN ATTIC ARE INSULATED TO R8. ALL OTHER DUCTS IN UNCONDITIONED SPACES OR OUTSIDE THE BUILDING ENVELOPE ARE INSULATED TO R6.
- ALL JOINTS, SEAMS, CONNECTION MUST BE SECURELY FASTENED WITH WELDS, GASKETS, MASTICS, MASTIC-PLUS-EMBEDDED-FABRIC OR TAPES (DUCT TAPE NOT PERMITTED).
- DUCTS MUST BE SUPPORTED EVERY 10 FEET OR PER MANUFACTURER.
- COOLING DUCTS WITH EXTERIOR INSULATION COVERED WITH VAPOR RETARDER.
- AIR FILTERS REQUIRED IN RETURN-AIR.
- HVAC MUST PROVIDE MEANS FOR BALANCING AIR AND WATER SYSTEMS.
- DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM No. 26 GAGE (0.48 mm) SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER IRC R302.5.2.

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- DRYER EXHAUST DUCT, WHERE THE EXHAUST DUCT IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH OF THE EXHAUST SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG. THE LABEL OR TAG SHALL BE LOCATED WITHIN 6 FEET OF THE EXHAUST DUCT CONNECTION. 2012 IRC M1502.4.5

MAKEUP AIR AT LAUNDRY RM/KITCHEN

FLOOR AREA (SQ.FT.)	NUMBER OF BEDROOMS	CONTINUOUS REQUIRED EXHAUST (CFM)	FACTOR	INTERMITTENT RUN-TIME PER EVERY 4HRS	REQUIRED EXHAUST (CFM)	SPECIFIED DESIGN		
						FAN OPERATION	FAN EXHAUST (CFM)	FAN LOCATION
631970	4	120	1.3	75%	156	INTERMITTENT	120	LAUNDRY

CALCULATED FROM 2015 IRC TABLE M1507.3.3(1) AND M1507.3.3(2)
SEE EQUIPMENT LIST FOR FAN MAKE, MODEL, AND SPECIFICATIONS
A. HONEYWELL HVC1000 CONTROLLER PROVIDED AND INSTALLED BY ELECTRICIAN AND PROGRAMMED BY MECHANICAL CONTRACTOR.
B. FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE DETERMINED BY INTERPOLATION.



DRAWING DATA

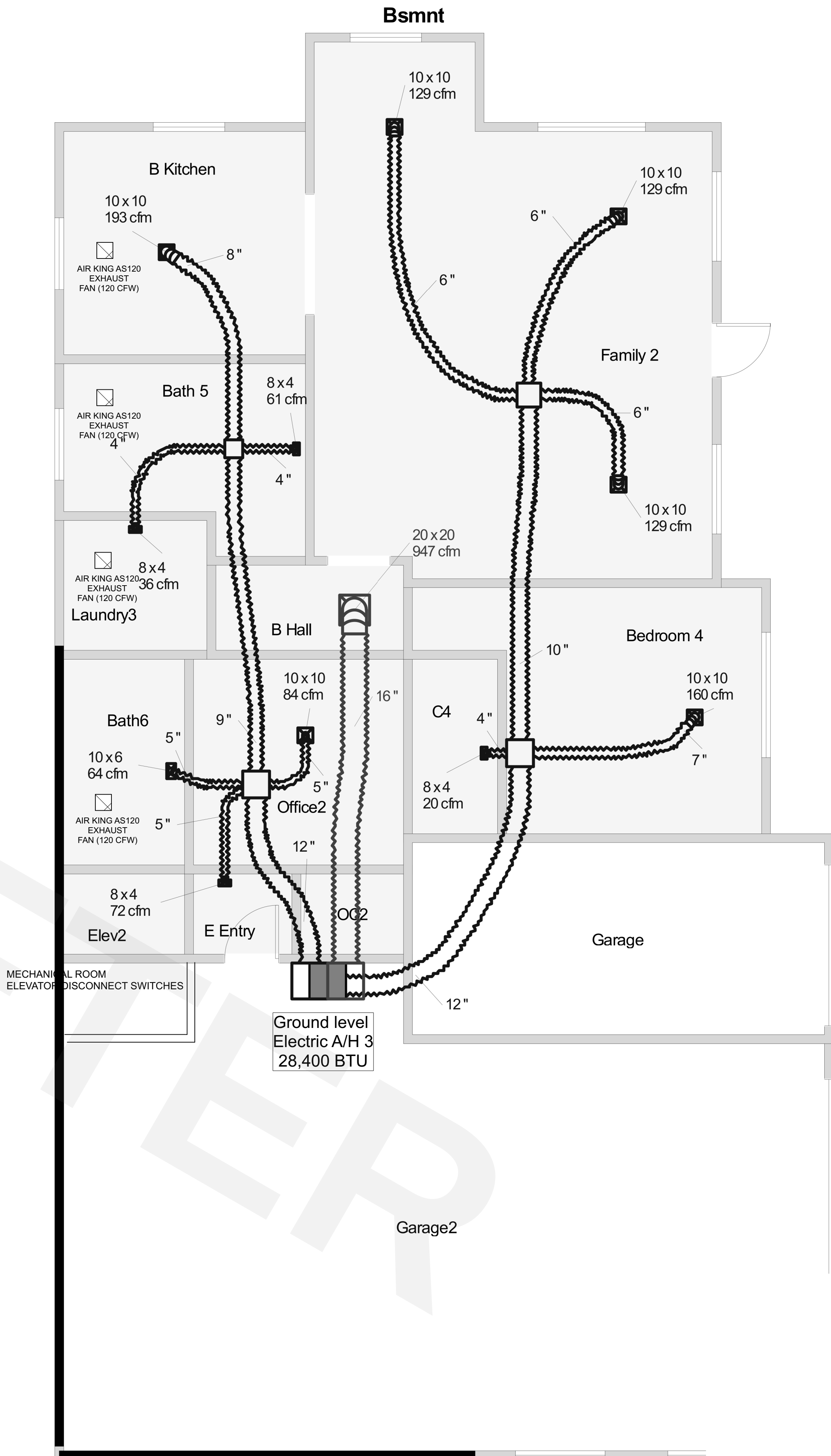
DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OF FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATIONS OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE APPROVAL OF DESIGNER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.

CONDENSATE AND FURNACE DRAIN LINES

CONDENSATE AND FURNACE DRAIN PIPING SHALL BE SCHEDULE 40 PVC. RUN DRAIN LINE FULL SIZE TO NEAREST PLASTER AREA FLOOR DRAIN, OR P-TRAP. INSTALL TRAPS IN LINES AS REQUIRED BY EQUIPMENT MANUFACTURER. COORDINATE SPECIAL REQUIREMENTS FOR DRAIN AND WATER THAT MAY BE REQUIRED WITH SPECIAL EQUIPMENT WITH PLUMBING CONTRACTOR PRIOR TO COMPLETION OF ROUGH-IN.

REFRIGERANT PIPING

ABOVE GROUND, TYPICAL BUILDING PIPING SHALL BE TYPE ACR DRAWN-TEMPER COPPER TUBING WITH WROUGHT COPPER UNIONS. PIPING BELOW GROUND SHALL BE TYPE L ANNEALED COPPER TUBING. EXPOSED SUCTION PIPING SHALL HAVE 1-1/2" INSULATION. CONCEALED SUCTION PIPING SHALL HAVE 1" INSULATION. INSULATION SHALL BE "ARMAFLEX" FLEXIBLE ELASOMERIC, OR EQUAL.



SHEET NUMBER

M102

SCALE @ 24" X 36"

DATE:

DRAWN BY: DAI

MECHANICAL PLAN

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