



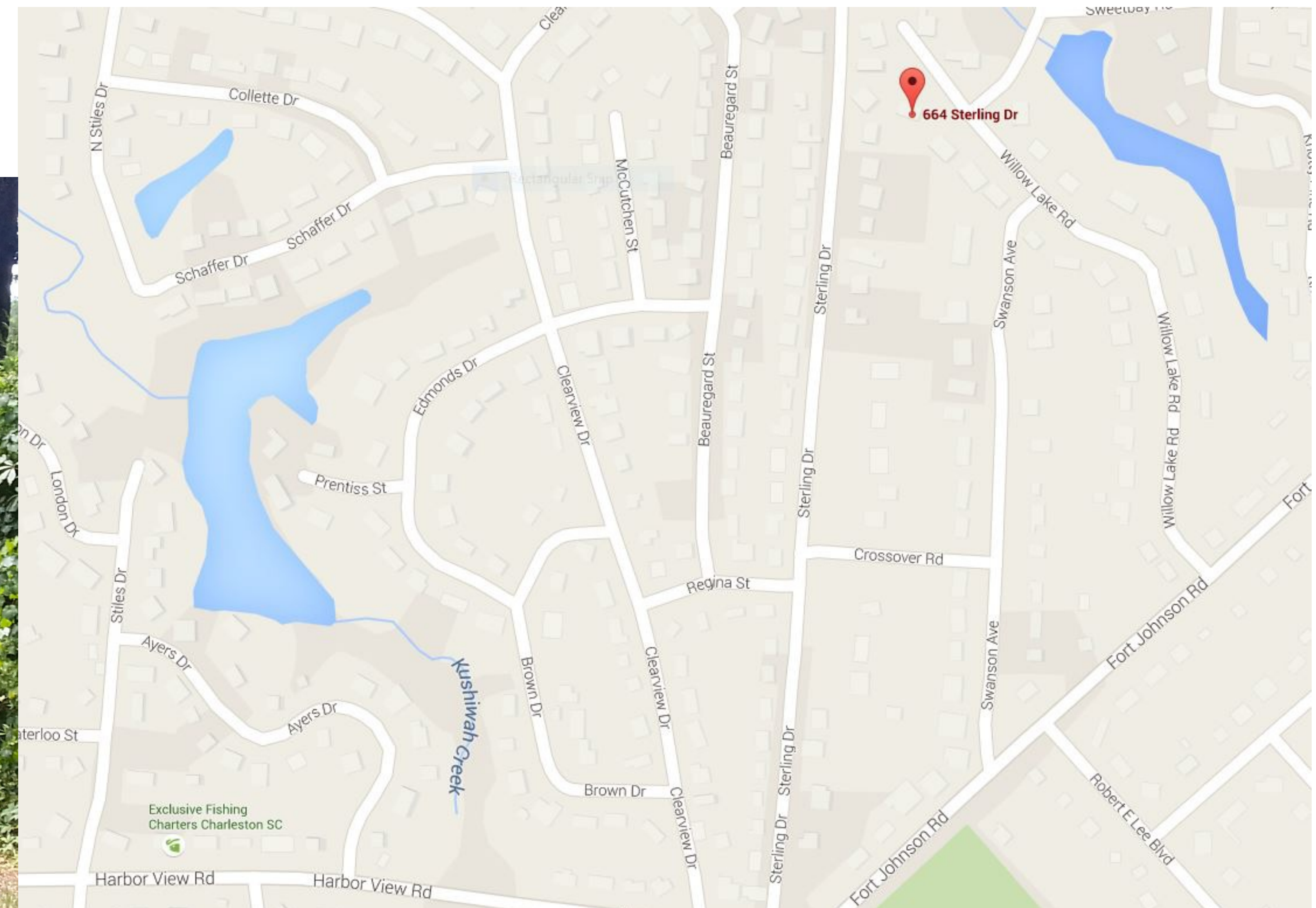
Proposed New Garage Front View

Proposed Garage Replacement

Existing garage footprint is 960sf. Proposed garage footprint is 1024sf. New Slab is poured over existing slab. Parts of existing slab to be saw cut 18" back off new construction lines.



Existing Garage with Lean to



NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Project Overview

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

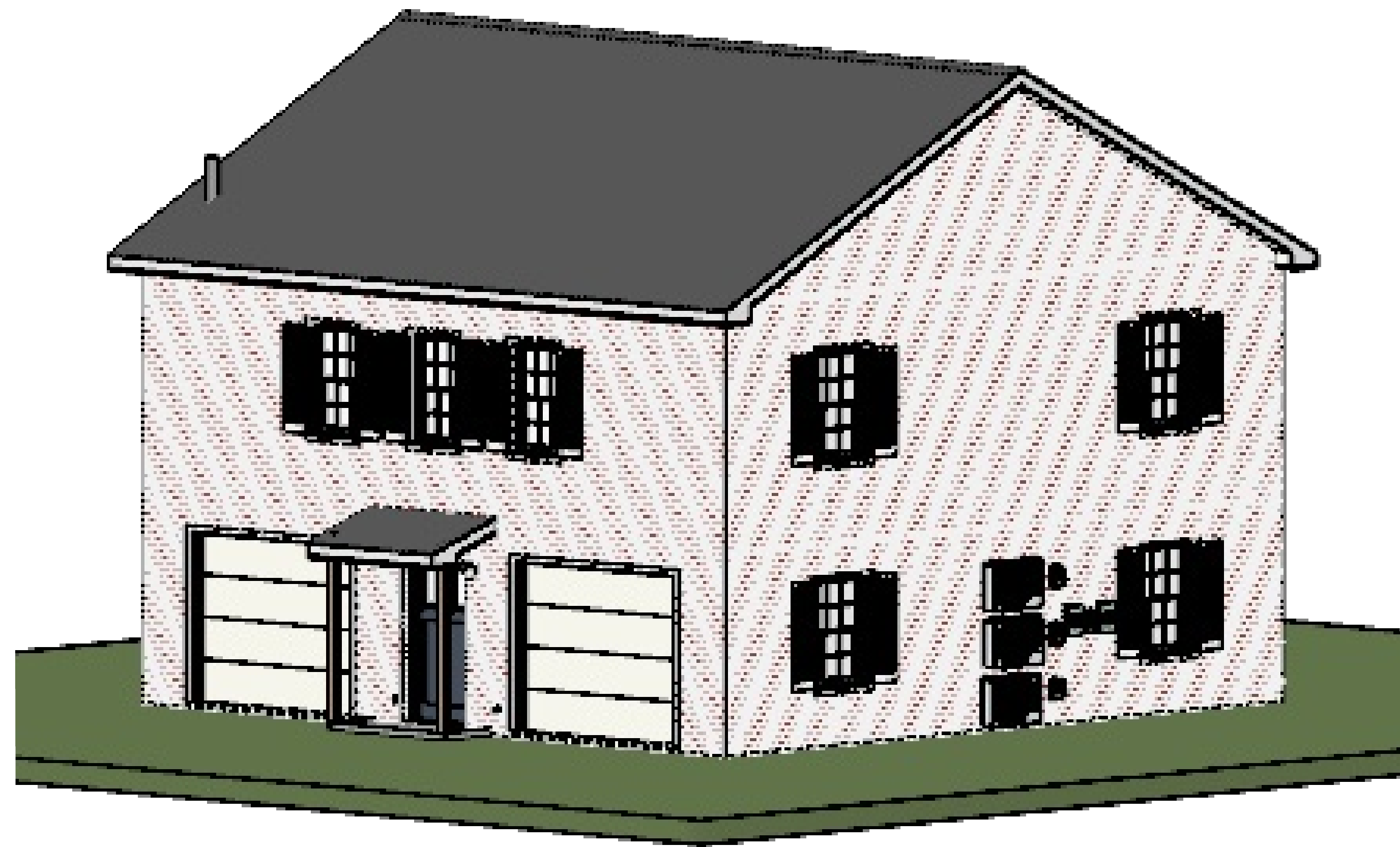
SCALE:

NONE

SHEET:

P-1

DRAWING LIST



A. CODES, PERMITS, AND FEES: OBTAIN ALL PERMITS AND LICENSES BEFORE STARTING WORK, AND PAY ALL FEES, INCLUDING UTILITY CONNECTION FEES AND PERMIT FEES. COMPLY WITH ALL CONSTRUCTION, DEPOSIT, AND BOND REQUIREMENTS AND REGULATIONS OF THE CITY OF JAMES ISLAND, SC ZONING AND PERMITTING DEPARTMENTS. COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING CODE AND GUIDELINES:

2015 South Carolina Building Code or the 2018 International Building Code with SC modifications;
 2015 South Carolina Residential Code or the 2018 International Residential Code with SC modifications;
 2015 South Carolina Fire Code or the 2018 International Fire Code with SC modifications;
 2015 South Carolina Plumbing Code or the 2018 International Plumbing Code.
 2015 South Carolina Mechanical Code or the 2018 International Mechanical Code.
 2009 South Carolina Energy Conservation Code; and,
 2017 National Electrical Code (NFPA 70)

B. ENERGY COMPLIANCE TO BE CHECKED WITH RESCHECK 4.6.5.1 AND ATTACHED WITH DRAWINGS.

C. NON-CONDITIONED ATTIC ASSEMBLY TO COMPLY WITH IRC 806.1

D. ALL VENTS AND DUCTS WHICH PENETRATE THE ENVELOPE OF THE STRUCTURE SHALL BE PROPERLY SLEEVED, FLASHED, AND COUNTER FLASHED FOR WEATHER AND MOISTURE TIGHTNESS.

GEOGRAPHIC AND CLIMATE INFORMATION:

LATITUDE: 32.8° N LONGITUDE: 79.9° W
 CLIMATE ZONE 3 WITHIN WARM-HUMID REGION PER 2006 IRC TABLE N1101.2,
 CLIMATE ZONES BY STATES AND COUNTIES SUMMER DESIGN TEMP:
 2006 INTERNATIONAL PLUMBING CODE, APPENDIX D, CHARLESTON WSO CITY REGIONAL CLIMATE AVE. ANNUAL PRECIPITATION:
 46 INCHES/YEAR PER SOUTHEAST REGIONAL CLIMATE CENTER RAINFALL INTENSITY:
 9 INCHES/HOUR (0.61 INCHES/5-MINUTE DURATION, 5-YEAR RECURRENCE)
 11 INCHES/HOUR (0.76 INCHES/5-MINUTE DURATION, 25-YEAR RECURRENCE)
 14 INCHES/HOUR (0.89 INCHES/5-MINUTE DURATION, 100-YEAR RECURRENCE)

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL BUILDING CODES AND REGULATIONS AS STATED IN THE GENERAL NOTES.
2. MECHANICAL, PLUMBING, AND ELECTRICAL WORK REQUIRED OF THIS PERMIT APPLICATION TO BE PERFORMED BY SUBCONTRACTORS LICENSED IN THE STATE OF SOUTH CAROLINA AND TOWN OF JAMES ISLAND IN WHICH THIS PROJECT IS BEING CONSTRUCTED.
3. SUBCONTRACTORS SHALL PROVIDE CERTIFICATION OF WORKMAN'S COMPENSATION AND GENERAL LIABILITY AS REQUIRED BY THE GENERAL CONTRACTOR PRIOR TO START OF WORK.
4. THE GENERAL CONTRACTOR SHALL PROVIDE AND COORDINATE ALL BUILDING PERMITS REQUIRED FOR CONSTRUCTION AND CERTIFICATES OF OCCUPANCY FOR THE OWNER.
5. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND PROCEDURES.
6. ALL DIMENSIONS AND SITE CONDITIONS TO BE FIELD VERIFIED AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. VERIFY WITH THE DESIGN TEAM OF ANY DISCREPANCY PRIOR TO COMMENCEMENT OF WORK.
7. IT SHALL BE THE RESPONSIBILITY OF GENERAL CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER INDICATED ON THE PLANS OR NOT, AND PROTECT THEM FROM DAMAGE.
8. ALL MATERIALS SHALL BE INSTALLED PURSUANT TO THE MANUFACTURER'S INSTRUCTIONS, SPECIFICATIONS, AND INDUSTRY STANDARDS.

Page	Drawing ID	Description For Drawing
1	P-1	Front Page
2	P-2	General Notes / Drawing List
3	P-3	Specifications
4	P-4	Site Drawing Existing
5	P-5	Site Location Overlay
6	P-6	Existing Garage Plan
7	A-1	1st Floor Plan
8	A-2	2nd Floor Plan
9	A-3	Roof Plan
10	A-4	Roof Material Information
11	A-5	Metal Roof Details
12	A-6	Cabinets, Doors, Windows and Finish Schedule
13	EL-0	Exterior Elevations
14	EL-1	1st Flr Plan for Elevations
15	EL-2	1st Flr Room Elevations
16	EL-3	2nd Flr Plan for Elevations
17	EL-4	2nd Flr Room Elevations
18	EL-5	2nd Flr Room Elevations Cont.
19	S-1	Structural Foundation Plan
20	S-2	Structual 2nd Floor
21	F-1	Floor 1 Framing
22	F-2	Framing Wall Schedule
23	F-3	2nd Floor Framing
24	F-4	Simpson Data Sheets
25	D-1	Details - Zip System Notes
26	D-2	Wall Details
27	I-1	Insulation Notes
28	I-2	Windborne Protection, Thermal building Envelope
29	MEP-1	1st Flr HVAC
30	MEP-2	2nd Flr HVAC
31	MEP-3	AC Installation
32	MEP-4	Attic Balanced Air Exchange
33	MEP-5	1st Flr Electrical
34	MEP-6	2nd Flr Electrical
35	MEP-7	Site Plumbing Layout
36	MEP-8	1st Flr plumbing
37	MEP-9	2nd Flr plumbing
38	MEP-10	Fire Alarms, Network Wiring
39	V-1	Central Vacuum System

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NONE

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P-2

DIVISION 2 SITEWORK :

- A. LANDSCAPE PROTECTION: PROVIDE BARRICADES AROUND TREES AND VEGETATION SHOWN TO REMAIN, OR OUTSIDE CLEARING LIMITS, AND PROTECT TREES FROM DAMAGE DURING CONSTRUCTION. REPLACE ALL EXISTING FINISHED LANDSCAPE MATERIALS DAMAGED BY CONSTRUCTION.
- B. CLEARING AND GRUBBING: CLEAR TREES AND VEGETATION AS INDICATED AND GRUB OUT TREE ROOTS. REMOVE CLEARED VEGETATION FROM THE SITE. PROVIDE BARRICADES AROUND TREES AND VEGETATION SHOWN TO REMAIN, AND PROTECT TREES FROM DAMAGE DURING CONSTRUCTION. NO TREES SHALL BE CUT OR TRIMMED WITHOUT THE OWNER'S PERMISSION.
- C. WATER SERVICE: CONNECT TO EXISTING WATER LINE METER AS SHOWN. WATER CONNECTION TO BE CHANGED FROM 3/4" SERVICE TO 1" SERVICE. PROVIDE 1 1/4" WATER SERVICE AS INDICATED. PROVIDE WATER SHUTOFF VALVE IN PLASTIC VAULT BOX AT GARAGE AND HOUSE IN AN AREA ACCESSIBLE TO THE HOMEOWNER. PROVIDE SEPARATE SHUTOFF VALVE FOR OUTSIDE IRRIGATION SYSTEM IN GARAGE. PROVIDE WHOLE-SYSTEM DRAIN DOWN FOR WINTERIZATION. COORDINATE VALVE LOCATION WITH HOMEOWNER.
- D. EXCAVATION AND TRENCHING: STRIP TOPSOIL AND STOCKPILE WHERE DIRECTED. EXCAVATE FOR FOUNDATION AND UTILITIES TO DEPTH AS SHOWN OR REQUIRED. SLOPE BOTTOM OF TRENCHES AT A CONSTANT SLOPE. KEEP FOOTING TRENCHES DRY. IF TRENCHES GET WET OR FROZEN, REMOVE ALL WET, SOFT, FROZEN, OR LOOSE SOIL BEFORE POURING FOOTINGS AND TURN DOWN CONCRETE SLABS.
- E. TERMITE CONTROL: THE CONTRACTOR SHALL TREAT THE SOIL UNDER THE BUILDING AGAINST INFESTATION BY TERMITES. TREATMENT SHALL BE APPLIED BY A LICENSED AND BONDED PEST CONTROL OPERATOR. APPLY TREATMENT UNDER ENTIRE SURFACE OF BUILDING.
- I. FUTURE DRIVEWAY: TO BE ACCOMPLISHED WITH NEXT PHASE. SEE LANDSCAPE PLANS FOR MATERIALS. INSTALL 4" PVC CONDUIT UNDER DRIVE FOR CABLE WIRING ACCORDING TO LOCAL GUIDELINES.
- K. FUTURE LAWN: TO BE ACCOMPLISHED WITH NEXT PHASE. SOG FROM APPROVED TURF FARM. PLACE ON SMOOTHED TOPSOIL WITH EDGES EVEN AND WITHOUT GAPS.

DIVISION 3 CONCRETE:

- A. CONCRETE TO BE 3000PSI 5 SACK MIX.
- B. VAPOR RETARDERS: ASTM E 1745, CLASS A WITH PERMEANCE RATING OF LESS THAN 0.01, PER ASTM E 1745 SECTION 7.1.1 NOT LESS THAN 10 MILS THICK UNDER ALL INTERIOR CONCRETE SLABS. INCLUDE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE SENSITIVE JOINT TAPE. USE TWO LAYERS.

DIVISION 4 MASONRY :

- A. BRICK: TO BE SELECTED BY OWNER
- C. CONCEALED FLASHING: STAINLESS STEEL FABRIC BETWEEN 2 LAYERS OF ASPHALT-IMPREGNATED FIBERGLASS FABRIC. PROVIDE CONCEALED FLASHING AT ALL HEADS AND SILLS OF OPENINGS, BOTTOM OF CAVITIES, AND OTHER LOCATIONS IDENTIFIED ON THE PLANS. TURN ENDS UP OF FLASHING AT LEAST 1" TO FORM END DAMS, AND ATTACH TOP OF FLASHING TO ZIP WALL SYSTEM AND SEAL WITH ZIP TAPE OR ZIP LIQUID MEMBRANE.
- D. PROTECTION: STORE MASONRY MATERIALS UNDER COVER AND RAISED ABOVE THE GROUND TO KEEP DRY. HANDLE BRICK CAREFULLY TO PREVENT DAMAGE. COVER WALLS AT THE END OF EACH WORK DAY TO KEEP DRY. LAY MASONRY ONLY WHEN OUTSIDE TEMPERATURE IS AT LEAST 40 DEGREES AND RISING.
- F. LAYING MASONRY: COMPLY WITH ACI 530.1/ASCE 6/TMS 602-95 "SPECIFICATIONS FOR MASONRY STRUCTURES". LAY BRICK PLUMB, LEVEL, AND TRUE TO LINE, IN RUNNING BOND WITH JOINTS APPROX. 3/8" WIDE. LAY BRICK IN FULL BED OF MORTAR; TOOL EXPOSED JOINTS GRAPEVINE JOINT FOR BRICK, STRIKE NON-EXPOSED JOINTS FLUSH. PROVIDE GALVANIZED METAL TIES BETWEEN ZIP SYSTEM WALL AND BRICK FOR VENEER AS REQUIRED BY CODE.
- H. CLEANUP: REMOVE MORTAR DROPPINGS BEFORE THEY SET UP. REMOVE DEBRIS, EXCESS MATERIALS AND MORTAR DROPPINGS FROM THE WORK AREA DAILY, AND FROM THE SITE WHEN MASONRY WORK IS COMPLETED. CLEAN EXPOSED MASONRY AT COMPLETION OF MASONRY WORK, USING STIFF FIBER BRUSHES AND CLEANERS RECOMMENDED BY BRICK MANUFACTURERS.

DIVISION 5 METALS :

- A. RAILINGS: SEE PLANS FOR DETAILS
- B. METAL DRIP EDGE INSTALLATION:
 - 1. COMPLY WITH SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL" ALLOW FOR THERMAL EXPANSION; SET TRUE TO LINE AND LEVEL. INSTALL WORK WITH LAPS, JOINTS, AND SEAMS PERMANENTLY WATERTIGHT AND WEATHERPROOF; CONCEAL FASTENERS WHERE POSSIBLE.
 - 2. SEALED JOINTS: FORM NONEXPANSIVE, BUT MOVABLE, JOINTS IN METAL TO ACCOMMODATE ELASTOMETRIC SEALANT TO COMPLY WITH SMACNA STANDARDS.
 - 3. FABRICATE NON MOVING SEAMS IN SHEET METAL WITH FLAT-LOCK SEAMS. FOR METALS OTHER THAN ALUMINUM, TIN EDGES TO BE SEAMED, FORM SEAMS, AND SOLDER. FOR ALUMINUM, FORM SEAMS AND SEAL WITH EPOXY SEAM SEALER. RIVET JOINTS FOR ADDITIONAL STRENGTH.
 - 4. SEPARATION: SEPARATE NON COMPATIBLE METALS OR CORROSIVE SUBSTRATES WITH A COATING OF ASPHALT MASTIC OR OTHER PERMANENT SEPARATION.
 - 5. MULTIPLE PIECE ASSEMBLIES ARE NOT PERMITTED, UNLESS END DAMS, JOINTS, ETC. ARE SOLDERED OR WELDED TO CREATED WATERTIGHT SEAMS.

DIVISION 6 CARPENTRY :

- A. FRAMING INSTALLATION: FRAMING METHODS TO COMPLY WITH AFPA "DETAILS FOR CONVENTIONAL WOOD FRAME CONSTRUCTION." PROVIDE DOUBLE JOISTS UNDER PARTITIONS PARALLEL TO JOISTS. PROVIDE SOLID BLOCKING AT BEAMS AND BEARING WALLS, AND 1X3 CROSS BRIDGING OR SOLID BLOCKING NO FARTHER THAN 8 FT. APART FOR ALL JOISTS SPANNING OVER 10 FT. FRAME EXTERIOR WALLS WITH 2X4 STUDS AND INTERIOR WALLS WITH 2X4 STUDS, OR AS NOTED OTHERWISE ON DRAWINGS, AT 16" O.C., WITH A SINGLE BOTTOM PLATE, DOUBLE TOP PLATES, AND SOLID BLOCKING BETWEEN STUDS AT 4 FT. ABOVE FLOOR
- B. NAILS: SIZES AND SPACING TO COMPLY WITH IRC TABLE 602.3 (1). USE STAINLESS STEEL RING-SHANK NAILS FOR ALL EXTERIOR WOODWORK.
- C. EXTERIOR TRIM: "ELITE TREATED" BY SOUTHERN LUMBER AND MILLWORK COMPANY. TO BE PRIMED ON ALL SIDES AND PRIMED AGAIN ON EXPOSED CUTS ONCE THEY ARE MADE. TO BE PAINTED. OPTION: ENDURE TRIM BY LIBERTY CEDAR
- F. ALL ROUGH CARPENTRY IS TO BE TREATED WITH BORA-CARE WITH MOLD-CARE PREVENTION TREATMENT. TO BE INSTALLED BY OWNER AND PER THE MANUFACTURER'S SPECIFICATIONS.
- G. INTERIOR TRIM : KILN-DRIED WHITE PINE, POPLAR, OR FIR, OR AS SPECIFIED ON THE DRAWINGS. TO BE HUNG IN LONG LENGTHS TO MINIMIZE RUNNING SPLICES. PROFILES AS DETAILED ON DRAWINGS, WITH BACKS OF FLAT TRIM PLOWED OR KERFED. SHELVING: 3/4" BIRCH PLYWOOD WITH SOLID HARDWOOD EDGE, OR APPROVED EQUIVALENT.
- H. INSTALLATION OF TRIM: PRIME AND BACKPRIME PAINTED TRIM BEFORE INSTALLATION. COPE INTERIOR CORNERS, AND MITER EXTERIOR CORNERS. USE SCARF JOINTS FOR SPLICES IN RUNNING TRIM AND STAGGER SPLICES IN MULTI-MEMBER PROFILES. SET ALL NAILS. COMPLY WITH ANI QUALITY STANDARDS FOR CUSTOM GRADE. CAROLINA MACHINE FINISHING TO PROVIDE PRIMED MATERIALS ON ALL 6 SIDES OF EXTERIOR TRIM
- I. WOOD STAIRS: 2X12 ROUGH STRINGERS, TREADS, RISERS, AND FINISH STRINGERS OF SPECIES SELECTED BY OWNER. CUSTOM NEWELS, GUARDRAILS, AND HANDRAILS AS DETAILED ON DRAWINGS.
- K. TRUSSES: TO BE SPECIFIED BY TRUSS MANUFACTURER. TRIM JOIST CORP. OR EQUIV.
- L. CABINETS, BUILT INS, AND COUNTERTOPS: ALL CABINETS TO BE IKEA UNITS. ALL HARDWARE, INCLUDING DRAWER SLIDES, PULLS, AND SELF CLOSING HINGES, COUNTERTOPS AND BACKSPLASHES TO BE SELECTED BY OWNER. SHOP DRAWINGS AND INSTALLATION BY OWNER.

DIVISION 7 THERMAL AND MOISTURE PROTECTION :

- A. BUILDING INSULATION: SPRAY APPLIED TWO COMPONENT CELLULAR POLYURETHANE FOAM. SEE CHART BELOW FOR TYPE AND THICKNESS OF FOAM. INSTALLATION SHALL BE BY LICENSED APPLICATORS. FILL GAPS AROUND DOORS, WINDOWS, BOTTOM PLATES, STUD AIR GAPS, PIPES, ELECTRICAL BOXES, ETC. WITH SPRAY FOAM SEALANT. BRACE DOOR AND WINDOW FRAMES TO PREVENT BOWING. REMOVE ALL OVERSPRAY AND PROJECTIONS BEYOND PLANE OF FRAMING TO RECEIVE FINISH MATERIALS. INTERIOR WALLS AROUND BATHROOMS AND MEDIA ROOMS TO HAVE 100 MM SOUND ATTENUATION BLANKETS. OPEN CELL FOAM: (TO BE USED IN VERTICAL WALLS) INSTALL SEALLECTION 500 (OR EQUIV) TO EXT. WALLS TO NOM. DEPTH OF 3 1/2". INSTALL SEALLECTION 500 (OR EQUIV) TO SUBFLOOR JOISTS TO NOMINOAF L DEPTH 8 1/2" (R30)
- CLOSED CELL FOA (MTO: BE USED IN ROOF RAFTERS AND UNDERSIDE OF 1ST FLOOR FRAMING)
- APPLY HEATLOK SOY FOAM TO ROOF DECK AT NOMINAL DEPTH OF 3" (2" AT GABLE DORMERS) AT ALL SLOPED ROOF RAFTERS. APPLY TO KNEE WALLS. AS
- B. FLASHING: 16 OZ. LEAD-COATED COPPER FLASHING OR APPROVED EQUAL. INSTALL FLASHING IN SHEETS NO LONGER THAN 10 FT., AND LAP SHEETS BY AT LEAST 8". TURN UP ENDS OF SILL FLASHING AT WINDOWS AND DOORS AT LEAST 1" (ONE INCH) TO FORM FANS AND SOLDER SEAMS.
- C. METAL ROOFING AND FLASHING: STANDING SEAM METAL ROOF. FORM STANDING SEAM ROOFING IN PANS 16" WIDE, WITH 1 1/4" HIGH SEAMS, IN SHEETS NO LONGER THAN 10 FT. AND LAP SHEETS A MINIMUM OF 8" (EIGHT INCHES) METAL ROOFS SLOPING 2 INCHES PER FOOT OR LESS TO BE SOLDERED FLAT LOCK SEAM. FABRICATE AND INSTALL METAL ROOFING AND FLASHING IN ACCORDANCE WITH SMACNA AND MANUFACTURER'S RECOMMENDATIONS. ALL METAL ROOFING AND ASSOCIATED FLASHING SHALL BE APPLIED OVER A CONTINUOUS ADHESIVE, SELF-HEALING, BITUMINOUS MEMBRANE (ICE AND WATER SHIELD, PEAL AND STICK, WATER SHIELD BY HENRY BLUESKIN) APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BITUMINOUS MEMBRANE UNDELAYMENT SHALL APPLY TO ALL DETAIL SECTIONS AT METAL ROOF SYSTEM.
- D. CAULKING: CAULK AROUND FLASHING, WINDOWS, DOORS, AND OTHER OPENINGS WITH ACRYLIC LATEX CAULK (INTERIOR) OR SILICONE BASED BASF SEALANT (EXTERIOR) COLOR TO MATCH MORTAR, STUCCO, OR SIDING COLOR. INSTALL BACKER RODS OR BOND-BREAKER TAPE, AND PRIME SURFACES AS RECOMMENDED BY SEALANT MANUFACTURER. CAULK ALL INTERIOR WALL TO FLOOR INTERSECTIONS AT PERIMETER
- E. GUTTERS AND DOWNSPOUTS: 6" HALF ROUND GUTTERS AND 4" ROUND DOWNSPOUTS. MATERIAL TO MATCH METAL ROOF COLOR AND BE COMPATIBLE. PROVIDE STRAINERS AT DOWNSPOUTS. INCLUDE HANGERS AND OTHER ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. PROVIDE EXPANSION JOINTS FOR GUTTERS OVER 40 FT. PITCH GUTTERS DOWN TOWARDS DOWNSPOUTS TO ASSURE DRAINAGE.
- F. DECK MEMBRANE: KEMPER LIQUID APPLIED ROOFING MEMBRANE. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- G. ROOFING: 26 GAUGE STANDING SEAM METAL ROOF WITH GRACE ICE AND WATER SHIELD UNDERLAYMENT OVER ENTIRE ROOF SYSTEM.
- H. STOGUARD AIR AND MOISTURE BARRIER- STO EMERALD COAT TO BE USED. FOLLOW STO GUIDE SPECIFICATION A1000E FOR DETAILS REGARDING THE APPLICATION OF THE PRODUCT. OPTION: GRACE PERM-A-BARRIER WALL MEMBRANE. INSTALLED PER MANUFACTURER'S INSTRUCTIONS
- I. LIQUID FLASHING BY BASF MASTERSEAL OR STOGUARD. VERIFY WITH ARCHITECT FOR APPROVAL. VERIFY WITH MANUFACTURER COMPATIBILITY WITH ADJACENT MATERIALS AND FASTENERS SUCH AS NAIL, SCREWS, METAL FLASHINGS, ETC.

DIVISION 8 DOORS AND WINDOWS:

- A. SEE DOOR AND WINDOW SCHEDULE SHEET FOR DETAILS ON SIZES AND SPECIFICATIONS. PROVIDE BOLLARD STOPS FOR ALL DOORS. ALL DOORS TO HAVE ADJUSTABLE HINGES.
- B. PROVIDE OWNER AND ARCHITECT WITH ALL DESIGN PRESSURE AND IMPACT PROTECTION CERTIFICATION AND INFORMATION BEFORE PURCHASING

DIVISION 9 FINISHES :

- A. DRYWALL: 5/8" GYPSUM BOARD WITH TAPERED LONG EDGES INSTALLED IN ALL CEILINGS, 1/2" ON ALL WALLS. MOISTURE RESISTANT IN BATHROOMS AND STORAGE, FIRE RATED IN GARAGE AREAS. INSTALL BOARDS AT RIGHT ANGLES TO FRAMING IN LONG LENGTHS WITH STAGGERED END JOINTS. APPLY IN ACCORDANCE WITH GYPSUM ASSOCIATION STANDARDS USING SCREWS OR ADHESIVE NAIL METHOD. WALL-CEILING INTERSECTION TO BE "FLOATING ANGLE". TAPE ALL JOINTS, FILL JOINTS AND NAIL HEADS, AND SAND TO PROVIDE A SMOOTH SURFACE (6A 214 LEVEL 4). INSTALL BULLNOSE CORNER BEADS AT ALL GYPSUM BOARD CORNERS. 2ND FLOOR CEILING SHEETROCK TO BE INSTALLED PRIOR TO WALL INSTALLATION TO PROVIDE BEST AIR SEAL CEILING.
- C. CERAMIC TILE AND STONE: COLORS, SIZES, AND PATTERNS TO BE SELECTED BY OWNER. MUD SET SHOWER FLOORS, AND INSTALL WALL AND FLOOR TILE OVER 1/2" WEDI BOARD WITH DRY-SET MORTAR IN ACCORDANCE WITH TILE COUNCIL OF AMERICA RECOMMENDATIONS. USE WHITE SILICONE CAULK AT TUB AND SHOWER BASE, CORNER JOINTS, AND COUNTERTOPS. GROUT OTHER JOINTS WITH MILDEN RESISTANT GROUT, WHITE FOR WALLS AND NATURAL COLOR FOR FLOORS, UNLESS OTHERWISE DIRECTED BY OWNER.
- D. CARPET AND PAD: TO BE SELECTED BY OWNER.
- E. PAINTING: MATERIALS TO BE BY SHERWIN WILLIAMS OR APPROVED EQUIVALENT. PREPARE SURFACES ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS. SURFACES TO BE SMOOTH, DRY, AND FREE OF DUST, DIRT, OR OIL. CAULK ALL JOINTS IN WOODWORK WITH PAINTABLE WEATHERPROOF CAULK BY DAP, BUTYL-FLEX, OR APPROVED EQUIV. SAND ENAMELED OR VARNISHED WOOD BETWEEN COATS TO REMOVE RAISED GRAIN. COLORS TO BE SELECTED BY OWNER. APPLY PAINTS IN ACCORDANCE WITH PAINT MANUFACTURER'S RECOMMENDATIONS, WITH ONE PRIME COAT AND TWO FINISH COATS UNLESS NOTED OTHERWISE.

DIVISION 10 SPECIALTIES:

- A. TOILET ACCESSORIES: PROVIDE TOWEL BARS, TOILET PAPER HOLDERS, SOAD DISH, TOOTHBRUSH/CUP HOLDERS, AS SELECTED BY OWNER. PROVIDE BLOCKING IN WALLS FOR ALL ACCESSORIES AND GRAB BARS
- B. SHOWER DOORS TO BE FRAMELESS WITH HARDWARE FINISHED TO MATCH SHOWER FITTINGS, AND 1/2" THICK TEMPERED GLASS, AS SELECTED BY OWNER.

DIVISION 11 EQUIPMENT:

- A. KITCHEN APPLIANCES: ALL TO BE SELECTED BY OWNER
- B. CENTRAL VACUUM, TO BE DIRT DEVIL OR APPROVED EQUAL. PROVIDE HOSE OUTLETS LOCATED SO THAT EVERY PLACE IN THE HOUSE CAN BE REACHED WITH A 20 FT. HOSE.
- C. PROVIDE OWNER WITH ALL OPERATING INSTRUCTIONS, OWNERS MANUALS, AND WARRANTY INFORMATION.
- D. PROVIDE DUCTED EXHAUST HOOD TO EXTERIOR. LOCATION MUST BE APPROVED BY THE OWNER.

DIVISION 12 FURNISHINGS :

- A. CONTRACTOR TO WORK WITH SELECTED CABINETRY COMPANY TO COORDINATE DELIVERY AND INSTALL OF CABINET SYSTEMS.
- B. CONTRACTOR TO ENSURE AREAS WHERE BUILT IN CABINETS ARE TO BE PLACED SHALL BE FREE AND CLEAR OF DEBRI.

DIVISION 13 SPECIAL CONSTRUCTION :

DIVISION 14 CONVEYING SYSTEMS:

DIVISION 15 MECHANICAL

- A. HOSE BIBS: WOODFORD MODEL 17 OR EQUAL. PROVIDE POLYBUTYLENE PIPE TO ALL HOSE BIBS, PROTECTED FROM SUNLIGHT, WITH SHUTOFF VALVES LOCATED IN HEATED SPACE. OPTION: HOUSE HYDRANT BY AQUOR WATER SYSTEMS.
- B. OPERATION AND MAINTENANCE INSTRUCTIONS: DEMONSTRATE ROUTINE OPERATION AND MAINTENANCE, INCLUDING PROGRAMMING OF THERMOSTATS AND CHANGING OF FILTERS TO THE HOMEOWNER. FURNISH THE HOMEOWNER WITH COPIES OF ALL PAPERS, INCLUDING PARTS LISTS, INSTALLATION INSTRUCTIONS, OPERATING AND MAINTENANCE INSTRUCTIONS WHICH COMES WITH EQUIPMENT.
- C. TESTING AND BALANCING: NOT REQUIRED WITH MINI SPLIT UNITS.
- D. WATER PIPING: PLUMBING SUPPLY LINES TO BE WIERSBO PEX PIPING. PROVIDE AIR CHAMBERS, 12" HIGH AND ONE PIPE SIZE LARGER THAN BRANCH PIPE, WITH STOPS AT EACH FIXTURE. BRACE PIPING TO FRAMING WITH COPPER OR PEX CLIPS. PRESSURE TEST AND CLEAN PIPING AFTER INSTALLATION. INSULATE ALL WATER PIPING WITH 1/2" RUBATEX OR 3/4" FIBERGLASS WITH ALL-SERVICE JACKET. PROVIDE DRAIN VALVE IN A READILY ACCESSIBLE LOCATION WHERE WATER SERVICE ENTERS HOUSE TO ALLOW COMPLETE DRAINAGE OF ALL WATER IN ALL PIPES.
- E. PLUMBING FIXTURES: AS SELECTED BY OWNER.
- F. DRAIN, WASTE, AND VENT PIPING: CAST IRON FOR DRAIN AND WASTE PIPING IN WALLS OF FIRST AND SECOND FLOOR. SCHEDULE 40 PVC OR ABS WITH SOLVENT-WELDED JOINTS FOR DRAIN AND WASTE PIPING ELSEWHERE AND FOR ALL VENTS. SLOPE PIPING EVENLY AT 1/4" INCH PER FOOT TO SEWER. WRAP DRAIN PIPING IN WALLS AND CEILING OF FIRST STORY WITH SOUND INSULATION. COMBINE VENT PIPES IN ATTIC AND RUN THROUGH ROOF ON LEAST VISIBLE SIDE OF RIDGE. PROVIDE FLASHING COLLARS DESIGNED FOR METAL ROOFING AT ROOF PENETRATIONS.

DIVISION 15 MECHANICAL :

- J. HEATING AND AIR CONDITIONING EQUIP: AS SELECTED BY OWNER. DEHUMIDIFIERS SHALL HAVE VARIABLE HUMIDISTAT ON-OFF AND FAN SPEED CONTROL. INSTALL DEHUMIDIFIER ON PERMANENT P.T. WOOD SHELVES IN LOCATIONS INDICATED ON DRAWINGS AND PIPE TO EXTERIOR GRADE. PROVIDE SYSTEM ZONING AS NECESSARY TO PERMIT THERMOSTATS IN BEDROOMS IF DESIRED BY OWNER.
- K. HVAC SYSTEM DESIGN: SIZE EQUIPMENT TO MAINTAIN 70 DEGREES INSIDE WHEN OUTSIDE TEMPERATURE IS 20 DEGREES, AND 72 DEGREES DB AND 55% RH INSIDE WHEN OUTSIDE TEMPERATURE IS 95 DEGREES DB AND 80 DEGREES WB.
- L. HVAC CONTROLS: PROVIDE AUTOMATIC CHANGEOVER HEATING-COOLING THERMOSTAT-HUMIDISTAT FOR EACH ZONE, AND SEPARATE THERMOSTAT FOR EACH SUB ZONE. THERMOSTAT TO RUN LOWER CAPACITY COMPRESSOR AND LOW SPEED BLOWER FOR REDUCED LOADS AND DEHUMIDIFICATION, AND RUN HIGHER CAPACITY COMPRESSOR STAGE AND INCREASE FAN SPEED AS COOLING LOAD INCREASES. PROVIDE A MOTORIZED DAMPER FOR EACH FRESH AIR INTAKE TO OPEN IT WHEN THE COMPRESSOR FOR THAT AIR HANDLER IS RUNNING. PROVIDE ALL LOW VOLTAGE CONTROL WIRING.
- M. DUCTWORK: SHEET METAL, DESIGNED IN ACCORDANCE WITH SMACNA STANDARDS. PROVIDE 4" METAL DUCTS FOR EXHAUST FANS AND DRYER VENT, AND VENT AS RECOMMENDED BY HOOD MANUFACTURER FOR RANGE HOOD WITH WALL OR ROOF CAPS.

- O. WATER HEATER: RINNAI (OR EQUAL) TANKLESS HOT WATER HEATERS WITH BUILT IN RECIRCULATION PUMP.
 - P. PROVIDE FRESH AIR SUPPLY FOR EVERY SYSTEM.
 - Q. PROVIDE ADEQUATE EXHAUST OF HEAT FROM ELECTRICAL/MECHANICAL/ELECTRONICS ROOMS.
- DIVISION 16 ELECTRICAL
- A. LIGHTING FIXTURES: AS SCHEDULED ON ELECTRICAL FLOOR PLANS.
 - C. EXHAUST FANS: PROVIDED FOR EACH BATHROOM. 75 CFM MIN.
 - D. SMOKE DETECTORS: AC POWERED SINGLE-STATION IONIZATION TYPE SMOKE DETECTORS WITH BATTERY BACKUP. INTERCONNECT ALL SMOKE DETECTORS.
 - E. DOOR CHIME: RING COM HARD WIRED CHIME WITH DOOR PUSH BUTTONS AS SELECTED BY OWNER AND TIED INTO HOME AUTOMATION SYSTEM.
 - F. TELEVISION WIRING: CAT 6 WIRING THROUGHOUT. PROVIDE JACKS WHERE SHOWN ON PLANS AND VERIFY LOCATIONS WITH OWNER. PROVIDE WIFI ACCESS POINTS ON EACH FLOOR, INCLUDING GARAGE.
 - G. LIGHTNING PROTECTION: N/A PROVIDE FULL HOUSE SURGE PROTECTION.
 - H. ELECTRIC SERVICE: 200 AMPERAGE SERVICE TO BE SUPPLIED.

DRAWINGS FOR:

Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Specifications

DRAWINGS PROVIDED BY:

RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

SHEET:

P-3

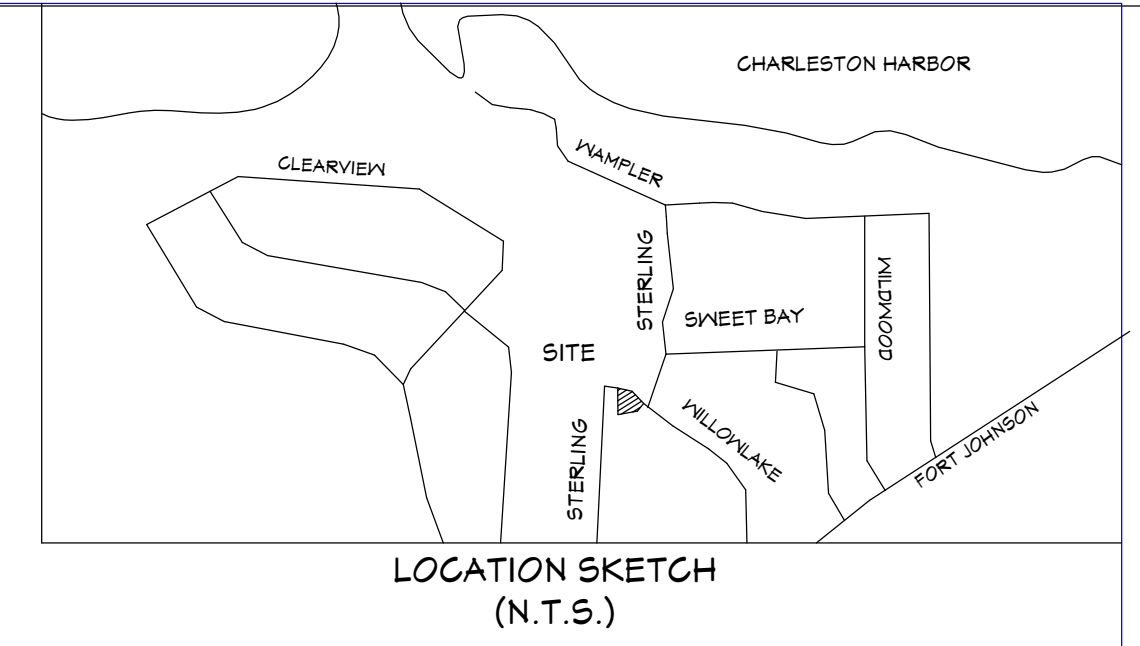
NUMBER	DATE	REVISION TABLE	REVISOR	DESCRIPTION

ROBERT FRANK SURVEYING

1923 MAYBANK HWY. - CHARLESTON, S.C. 29412
 PHONE: (843)762-4600 FAX (843)795-5970
 WEB ADDRESS: www.robertfranksurveying.com
 E-mail robertfranklandsurveying@comcast.net

LEGEND

- COMPUTED POINT
- UTILITY POLE
- PROPERTY LINE
- ADJOINER LINE
- OVERHEAD POWER LINE
- FENCE
- FLOOD ZONE CHANGE AS SCALED FROM FLOOD MAP



STERLING DRIVE 50' R/W

GRID NAD83/BLK10K-GPS

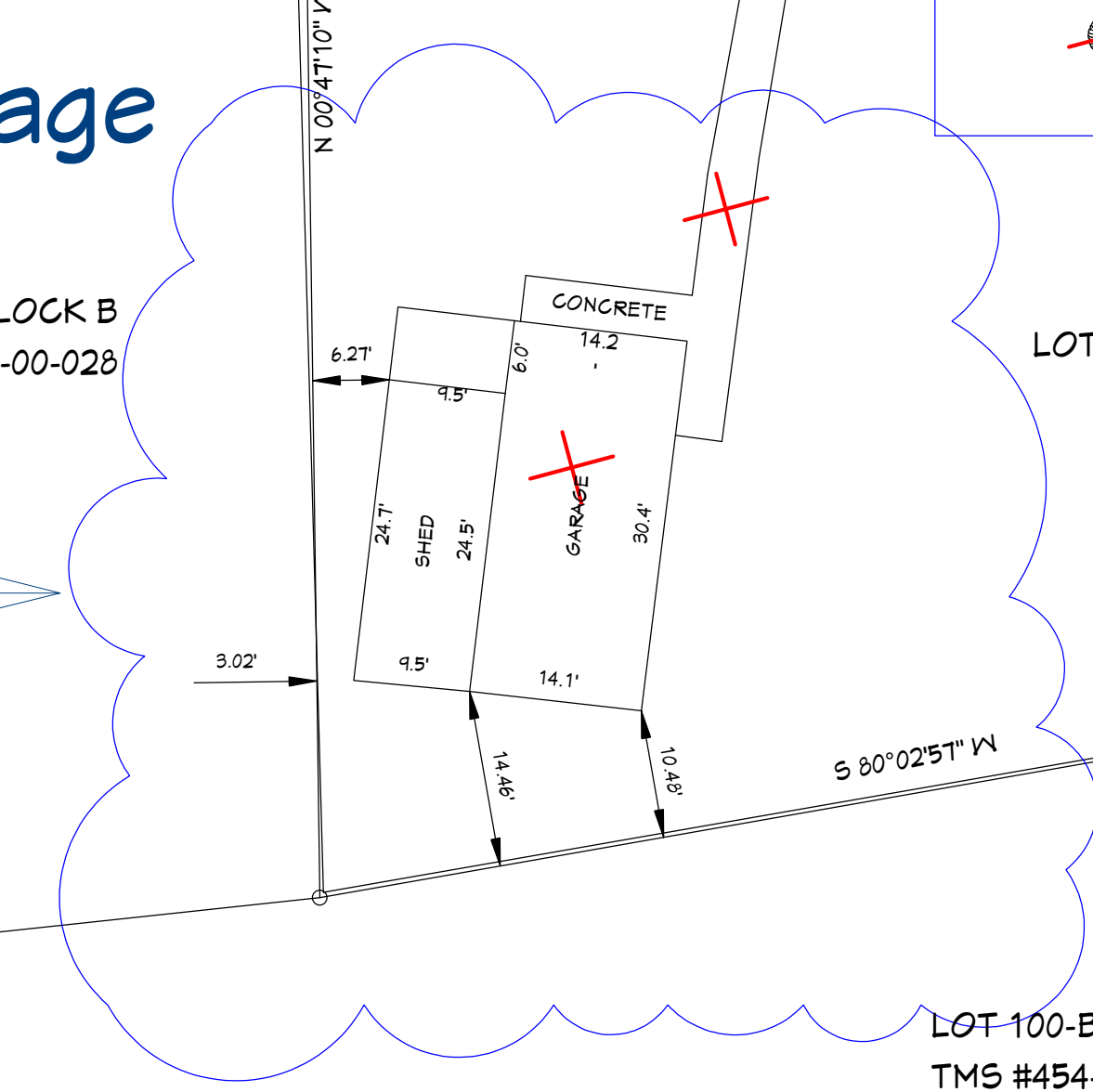
LOT 100-A BLOCK B
TMS #454-07-00-114

LOT 100-B BLOCK B
TMS #454-07-00-028

LOT 101 BLOCK B

LOT 9 BLOCK B
TMS #454-07-00-079

**Location of Existing Garage
See Next Sheet
for Enlarged Area
New Garage To
Be Overlayed at
Same Location**

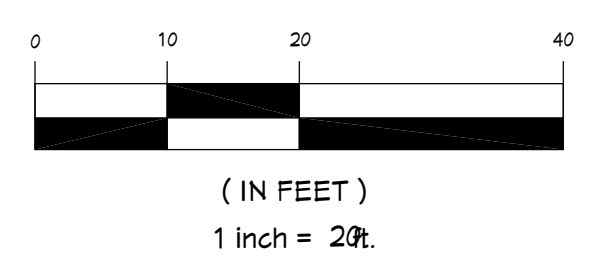


GENERAL PROPERTY SURVEY

NOTE:
THIS PLAT DOES NOT CONSTITUTE AN OFFICIAL SURVEY OF THIS PROPERTY UNLESS STAMPED WITH THE EMBOSSED SEAL OF THE SURVEYOR. THIS PLAT DOES NOT

DECEMBER 22, 2016

GRAPHIC SCALE



**A BOUNDARY SURVEY AND TREE LOCATION OF
LOT 101 OF THE EASTWOOD SUBDIVISION,
LOCATED IN THE TOWN OF JAMES ISLAND,
CHARLESTON COUNTY, S.C.**

- NOTES:**
1. TMS #454-07-00-029.
 2. STREET ADDRESS: 664 STERLING DRIVE.
 3. IRON PIPES FOUND AT ALL CORNERS UNLESS OTHERWISE SHOWN.
 4. LOCATED IN FLOOD HAZARD ZONES AE MINIMUM ELEVATION 12' AND ZONE X (NOT A SPECIAL FLOOD HAZARD AREA) PER FIRM COMMUNITY-PANEL #450263-601-J, PANEL INDEX DATED 11/17/04, MAP REVISED 11/17/04 (MAP #45019C0601-J).
 5. DEED REFERENCE: BOOK 0519 PAGE 000.
 6. PLAT REFERENCES: BOOK K PAGE 49, BOOK Q PAGE 9, BOOK CA PAGE 103.
 7. OWNED BY RALPH W. MARTIN.

REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Plot Plan

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

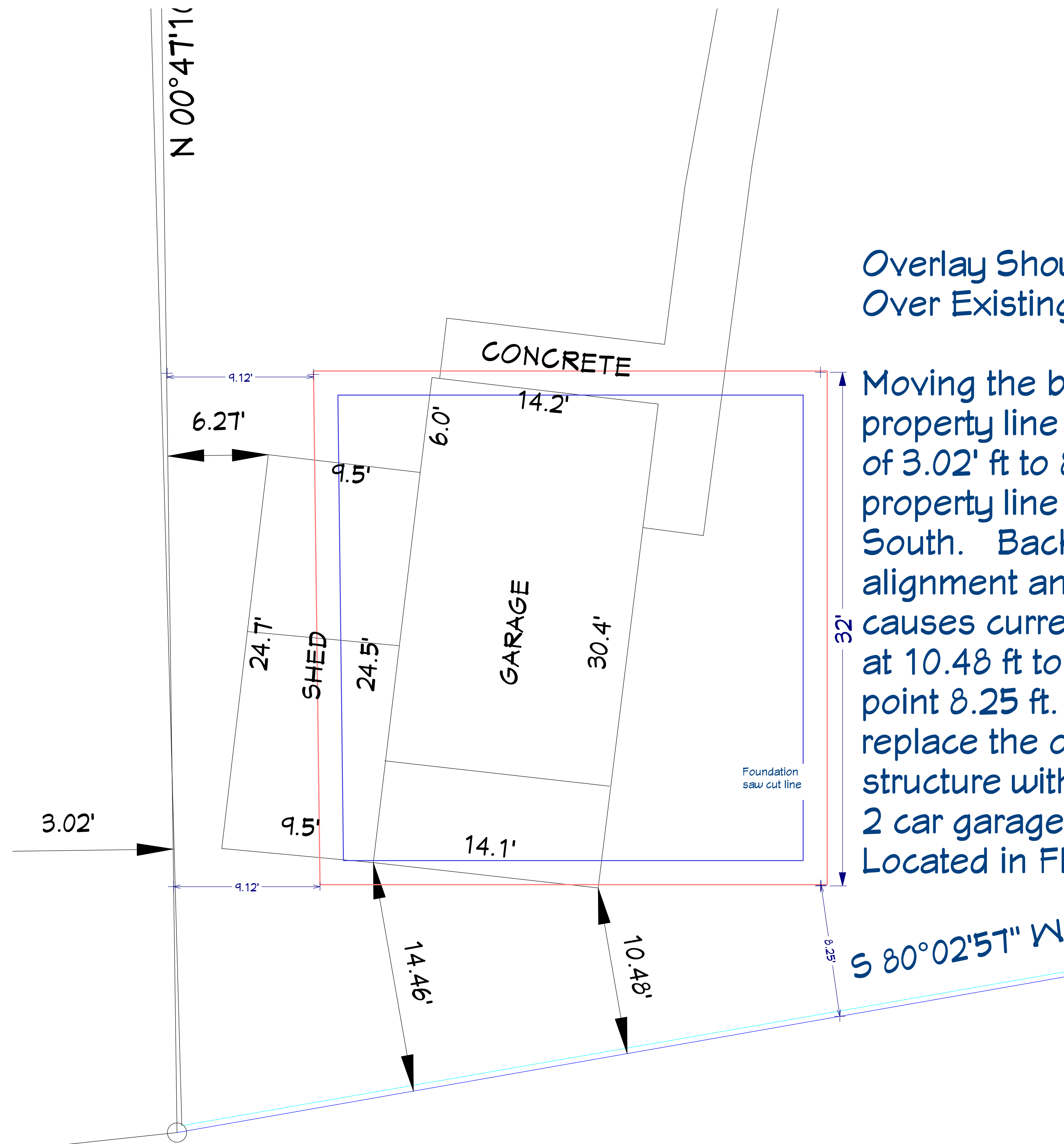
SCALE:

1" = 20'

SHEET:

P-4

LOT 100-B BLOCK B
TMS #454-07-00-028



Footprint Overlay

Overlay Showing New Garage Over Existing Structure

Moving the building off the left property line from a close point of 3.02' ft to 8 ft parallel to the property line facing North - South. Back of structure re-alignment and size increase causes current back of structure at 10.48 ft to change to closest point 8.25 ft. It is our intent to replace the old outdated structure with an energy efficient 2 car garage with home office. Located in Flood Zone X.

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Plot Plan Zoom in Section

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

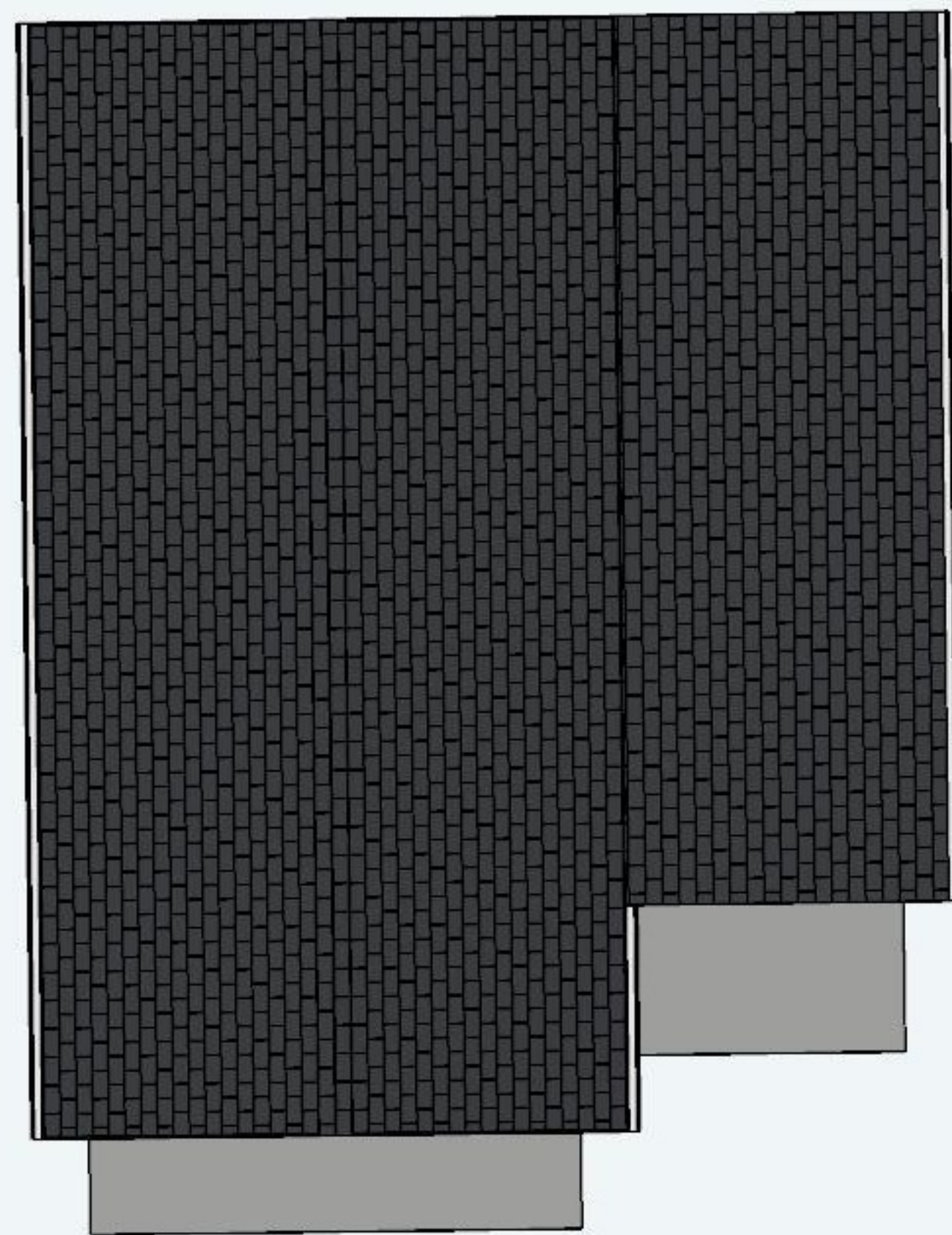
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SHEET:

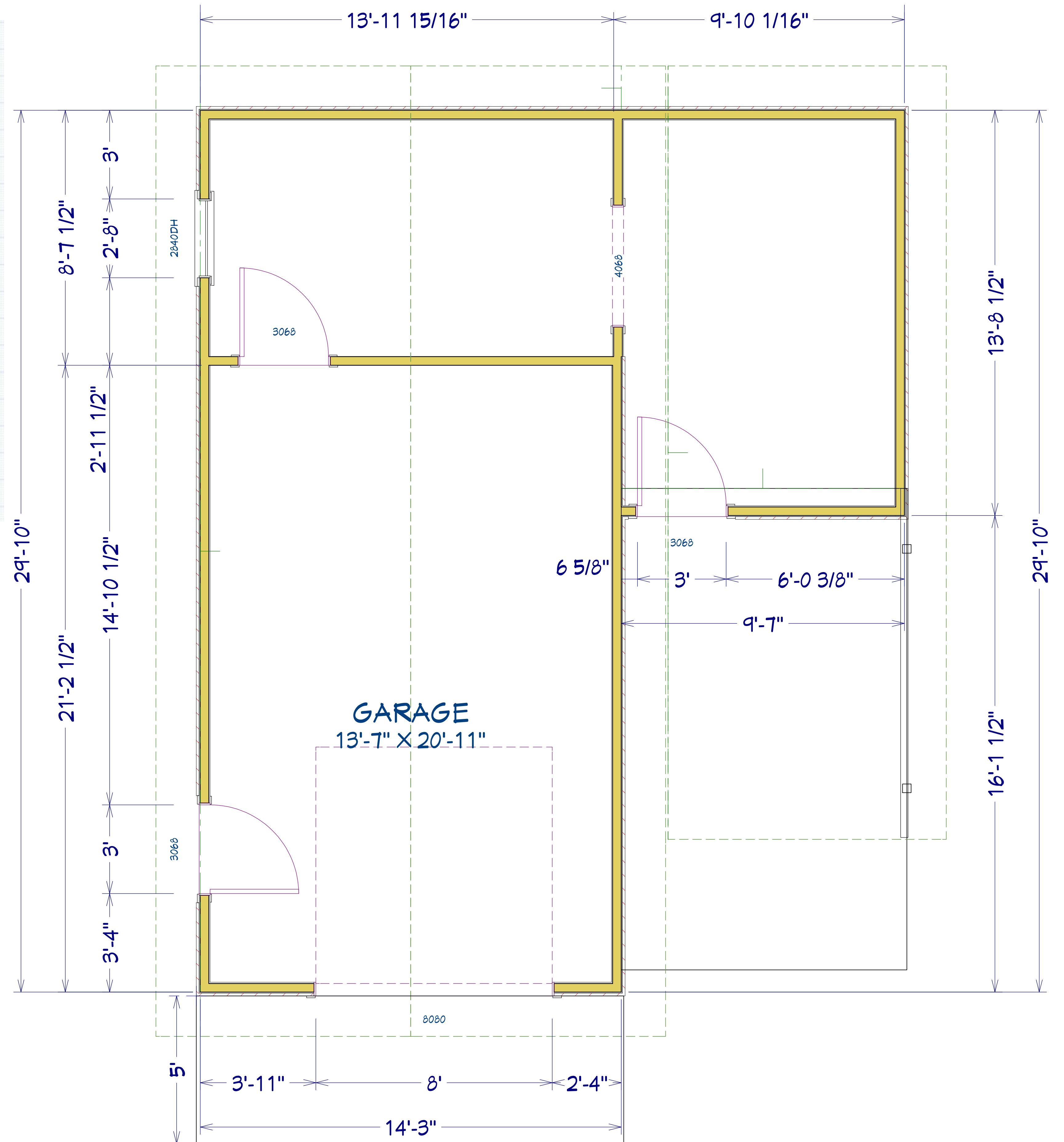
P-5



Existing Front View



Existing Overhead View



EXISTING GARAGE STRUCTURE
To Be Demolished

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Existing Garage Floor Plan

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

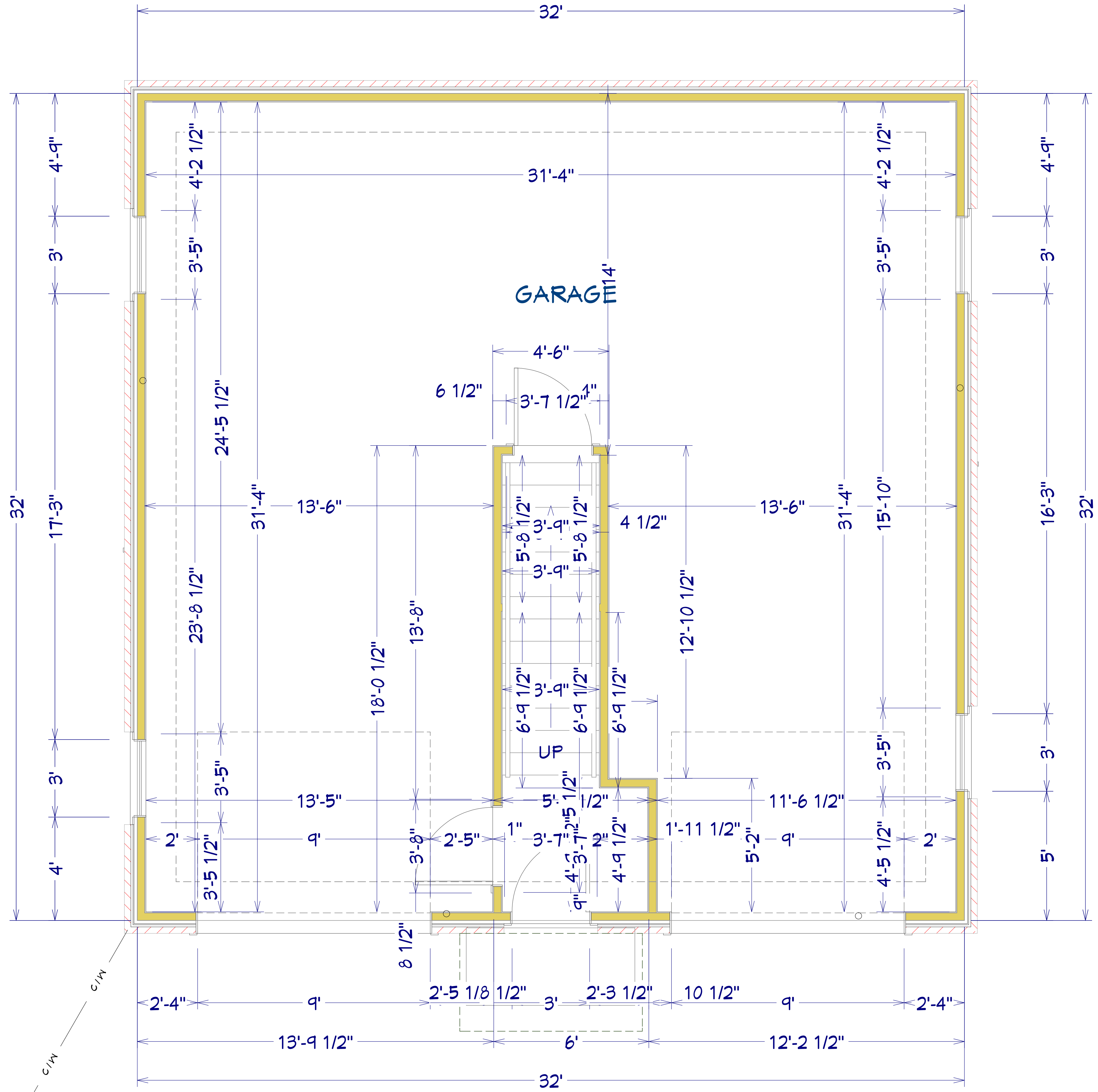
1/18/2021

SCALE:

1/2" = 1'

SHEET:

P-6



REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

1st Floor Plan - Garage

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

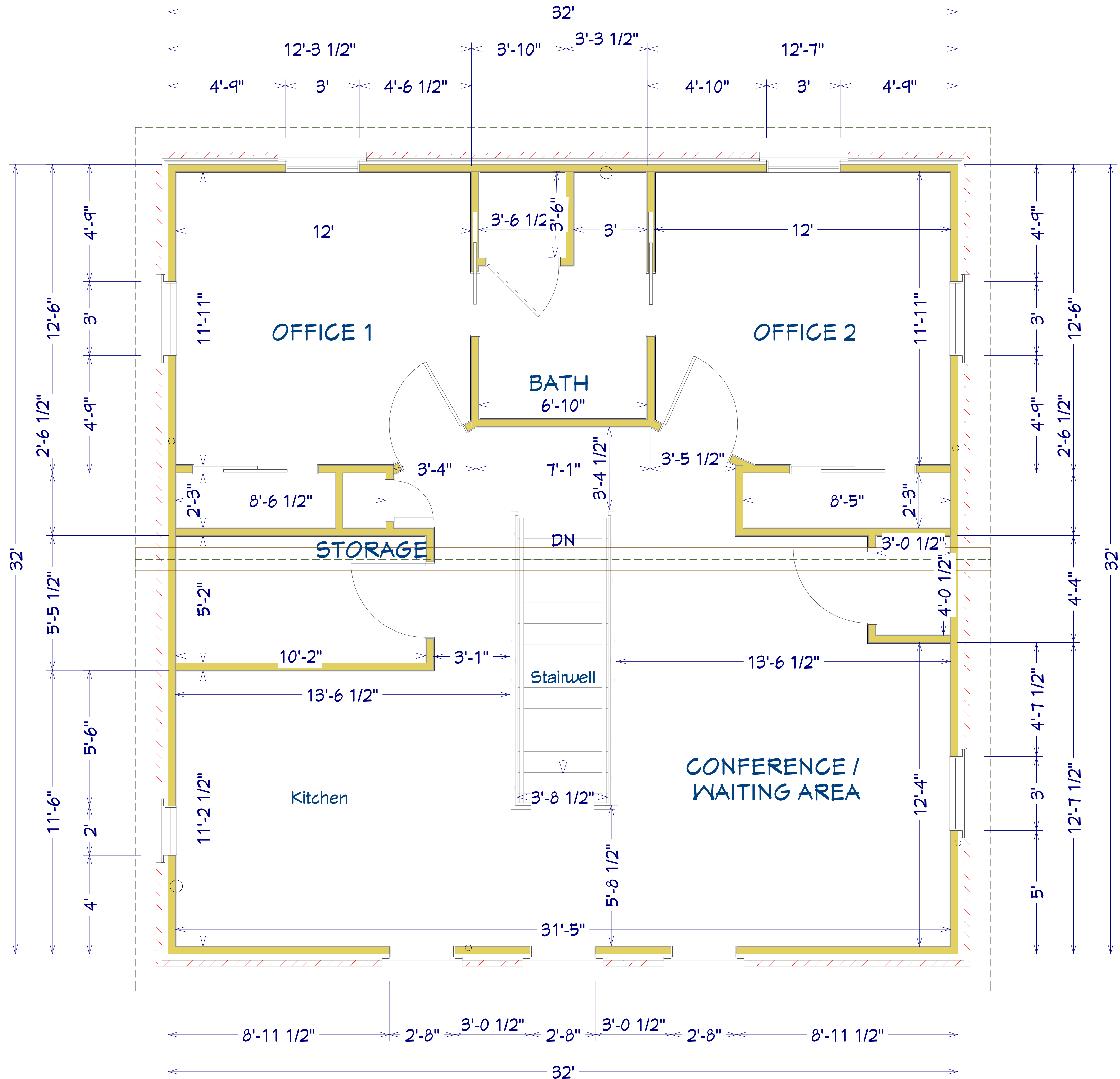
1/18/2021

SCALE:

1/2" = 1'

SHEET:

A-1



REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

2nd Floor Plan

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

SCALE:

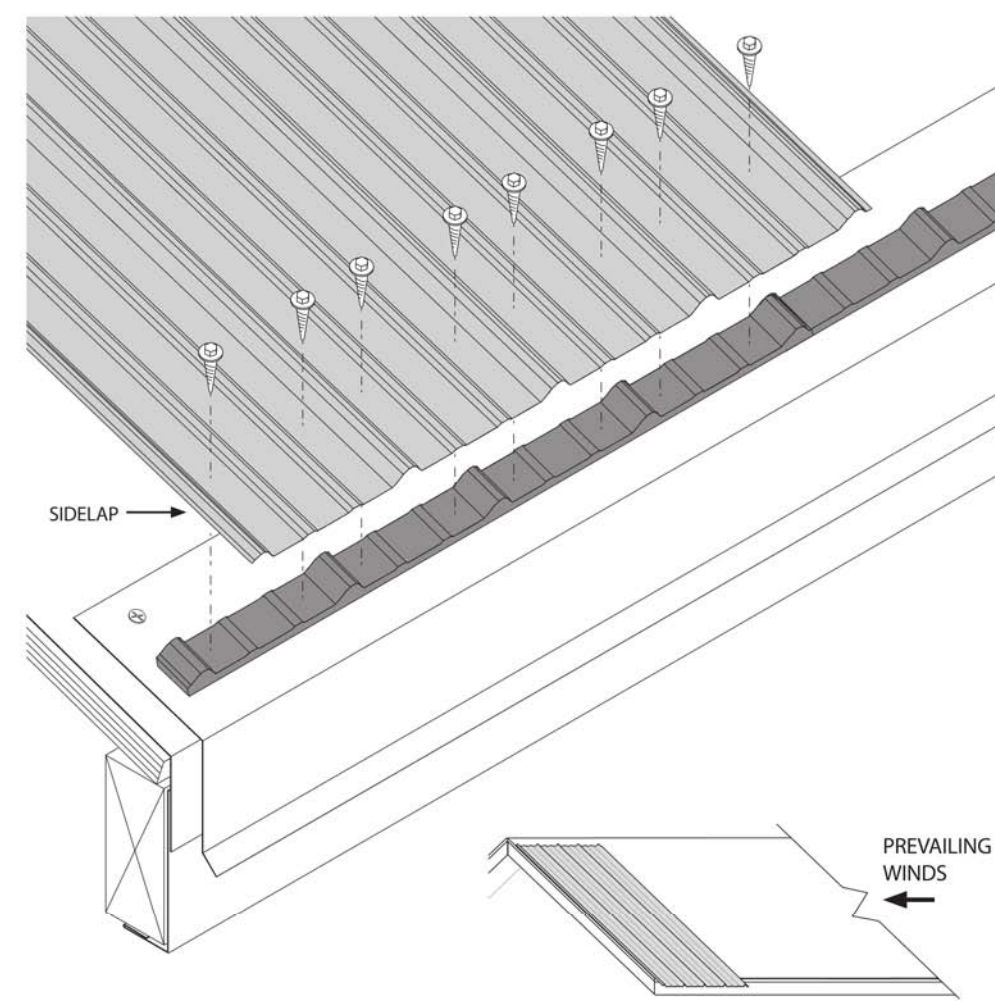
1/2" = 1'

SHEET:

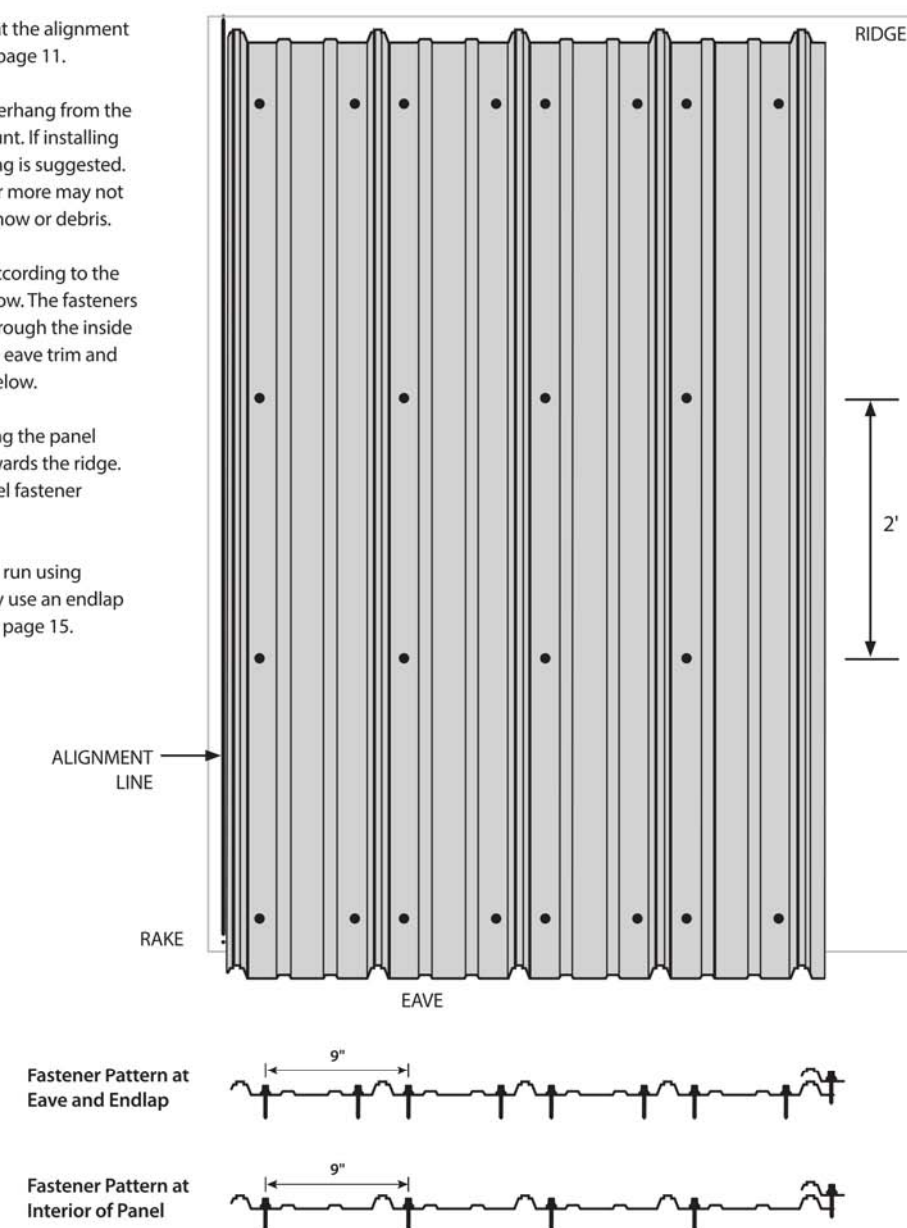
A-2

INSTALLING THE FIRST PANEL

Panels should be installed in the correct sequence as shown on pages 12-13. Install panels with the sidelap facing away from the prevailing wind.



1. Start the first panel at the alignment line you created on page 11.
2. The panel should overhang from the eave a desired amount. If installing gutters, a 1" overhang is suggested. An overhang of 6" or more may not support weight of snow or debris.
3. Fasten at the eave according to the fastener pattern below. The fasteners should penetrate through the inside closure, through the eave trim and into the substrate below.
4. Continue by fastening the panel every 2' running towards the ridge. Use the interior panel fastener pattern.
5. Continue with panel run using sidelaps. If necessary use an endlap condition shown on page 15.

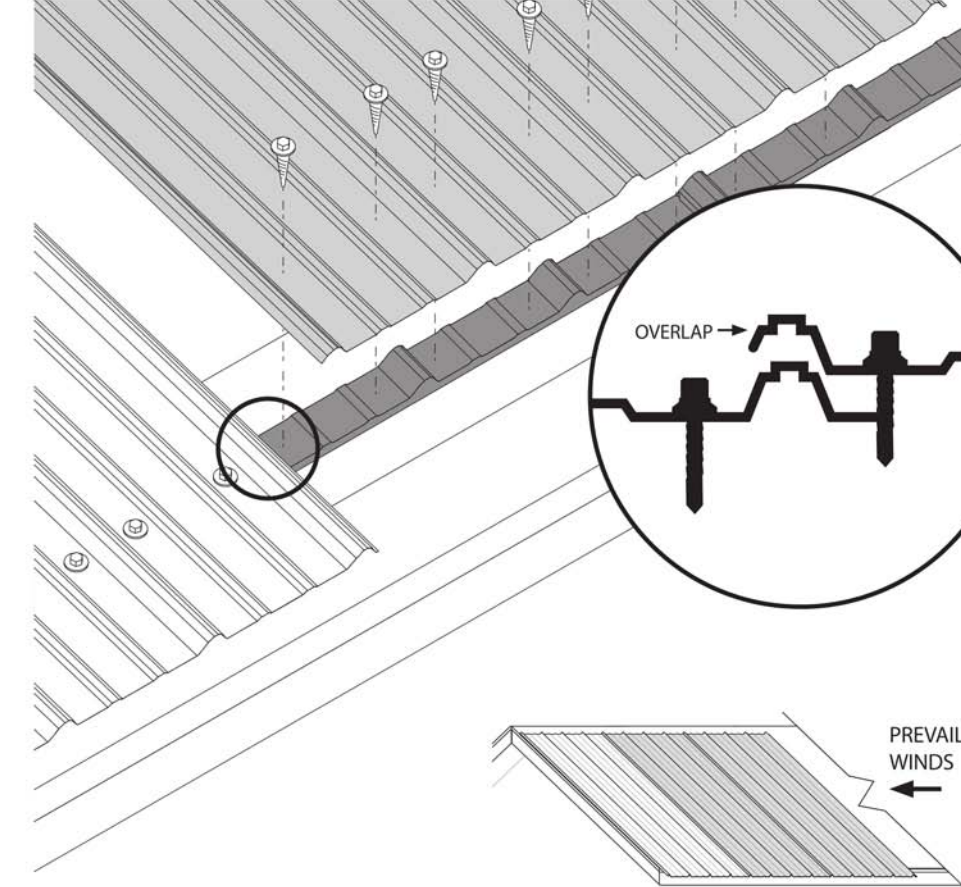


CAUTION Copper metallic panels must be installed in the same direction! See directional arrows or stickers provided with your metal panel order.

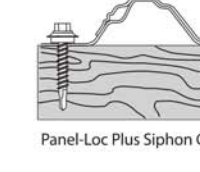
NOTE Fastener spacing for Panel-Loc or CD2000 can be found at www.centralstatesmfg.com.

INSTALLING SIDELAP PANEL

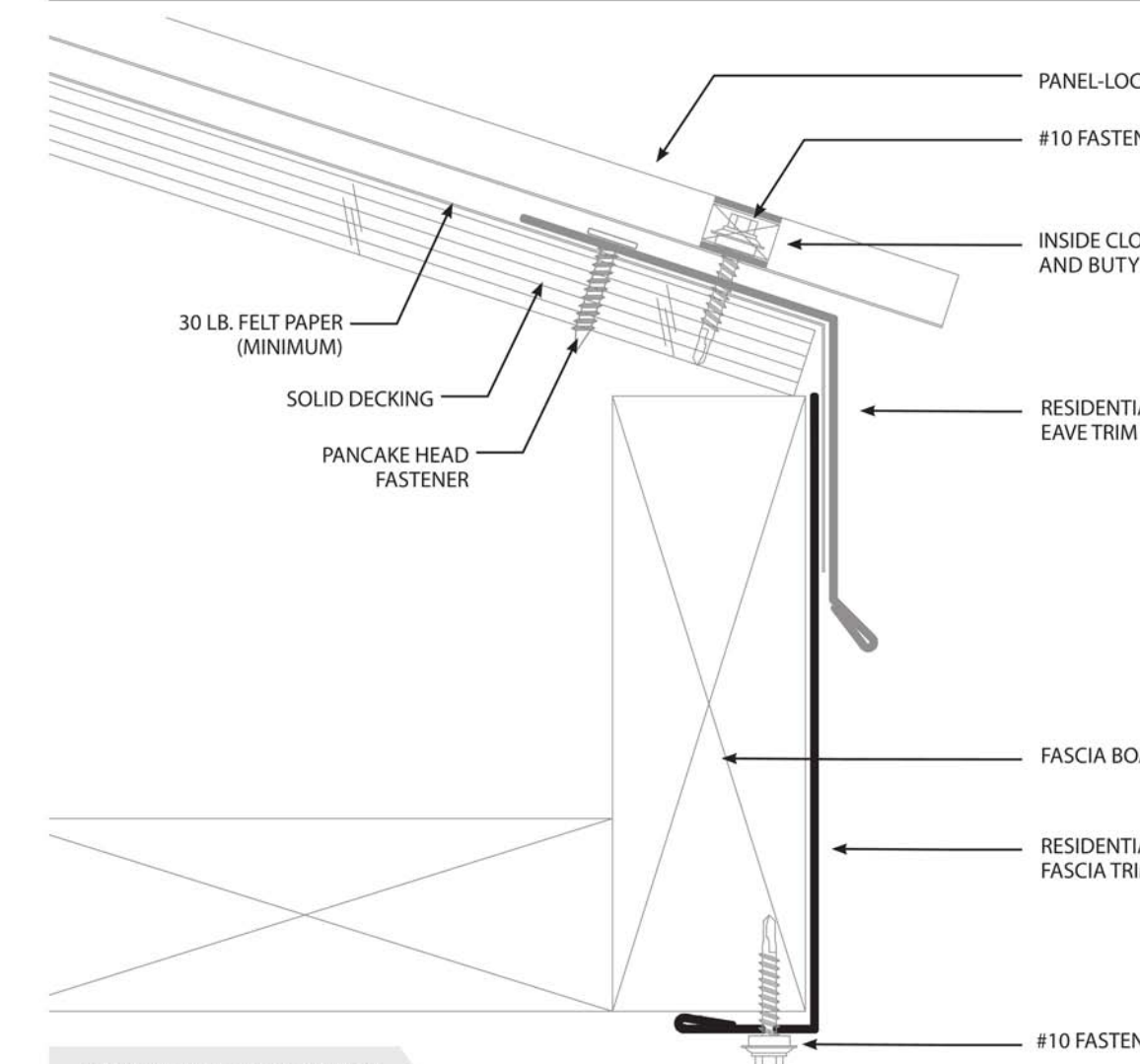
After the first panel is secure, proceed with the next panel by overlapping it on the side. Continue with fastener pattern shown on page 15.



CAUTION Do not damage the siphon groove by using a stitch screw on top of the major rib or clog it with butyl tape.



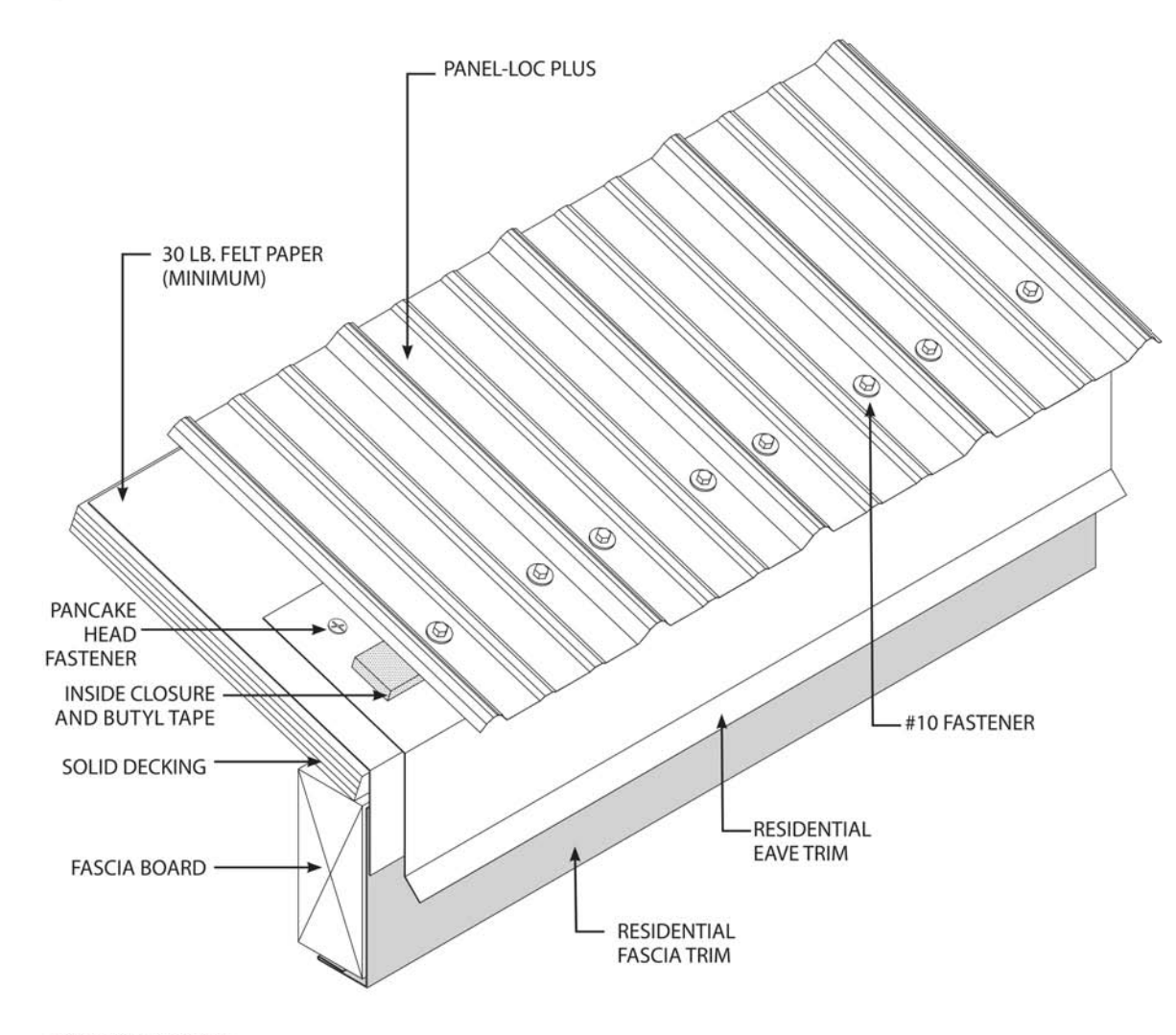
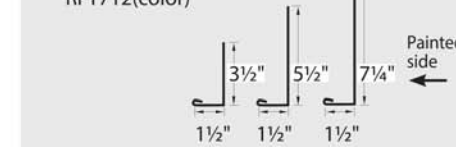
RESIDENTIAL FASCIA TRIM



ILLUSTRATED TRIMS:

FASCIA TRIM
RFT312(color)
RFT512(color)
RFT712(color)

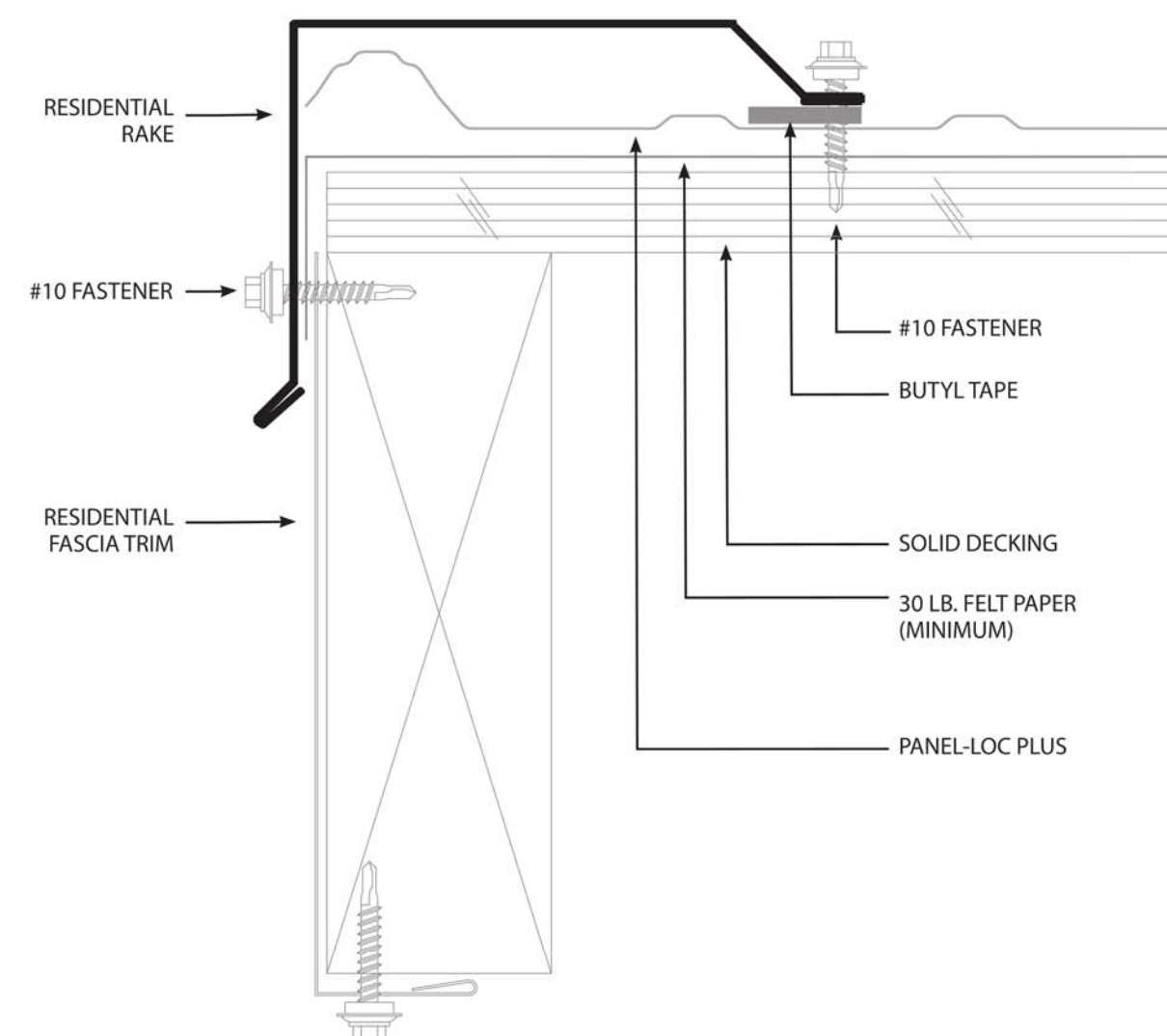
Choose trim with leg length that best covers the fascia board.



DIRECTIONS:

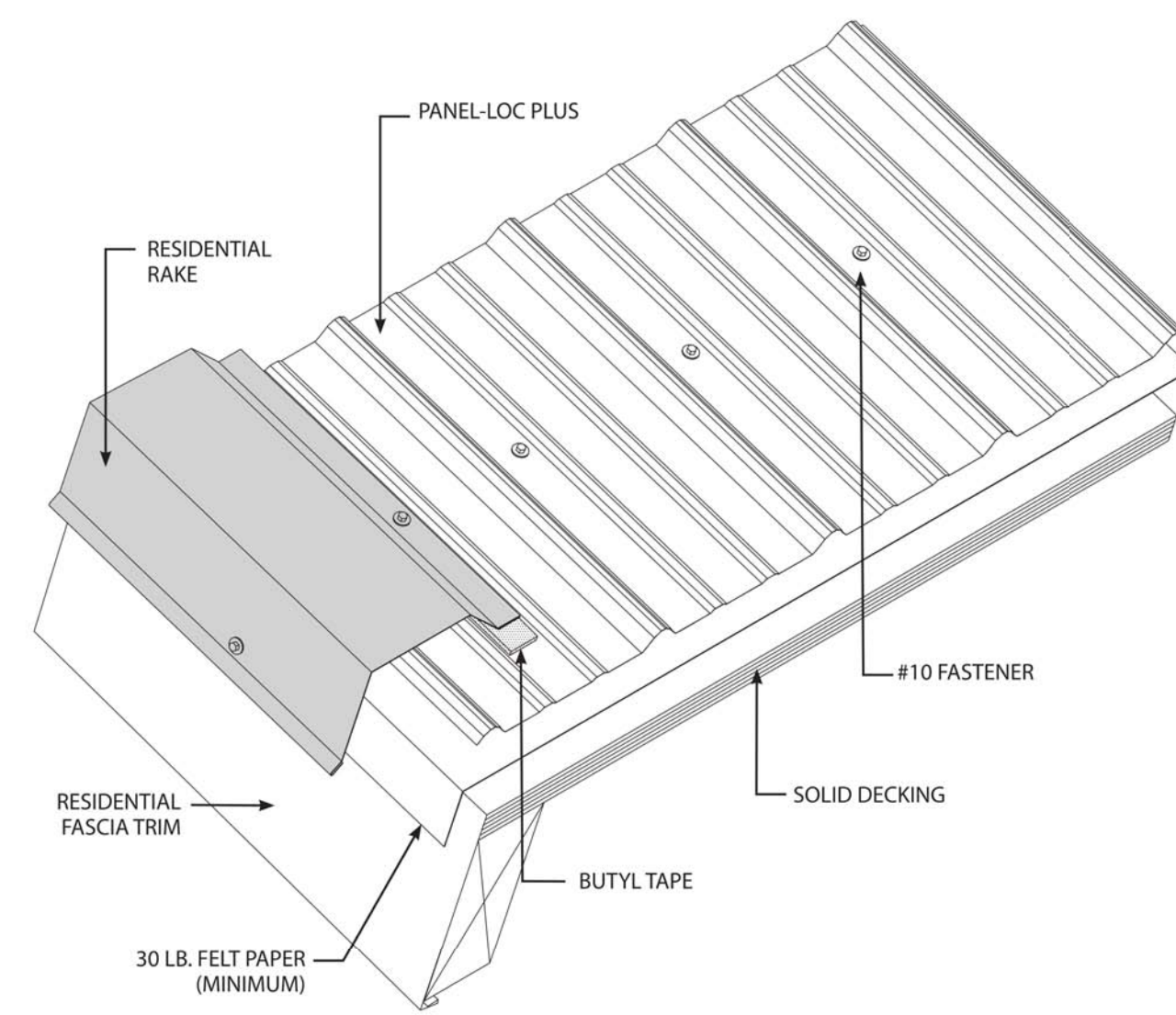
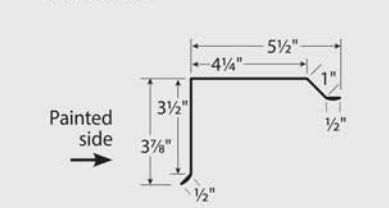
1. Choose a RFT with a leg length that best covers the fascia board.
2. Place RFT at fascia board and make sure roof felt overlaps RFT.
3. Fasten RFT to bottom of fascia board at 24" on center.
4. Continue by installing either Residential Drip Edge or Residential Eave Trim.

RESIDENTIAL RAKE



ILLUSTRATED TRIMS:

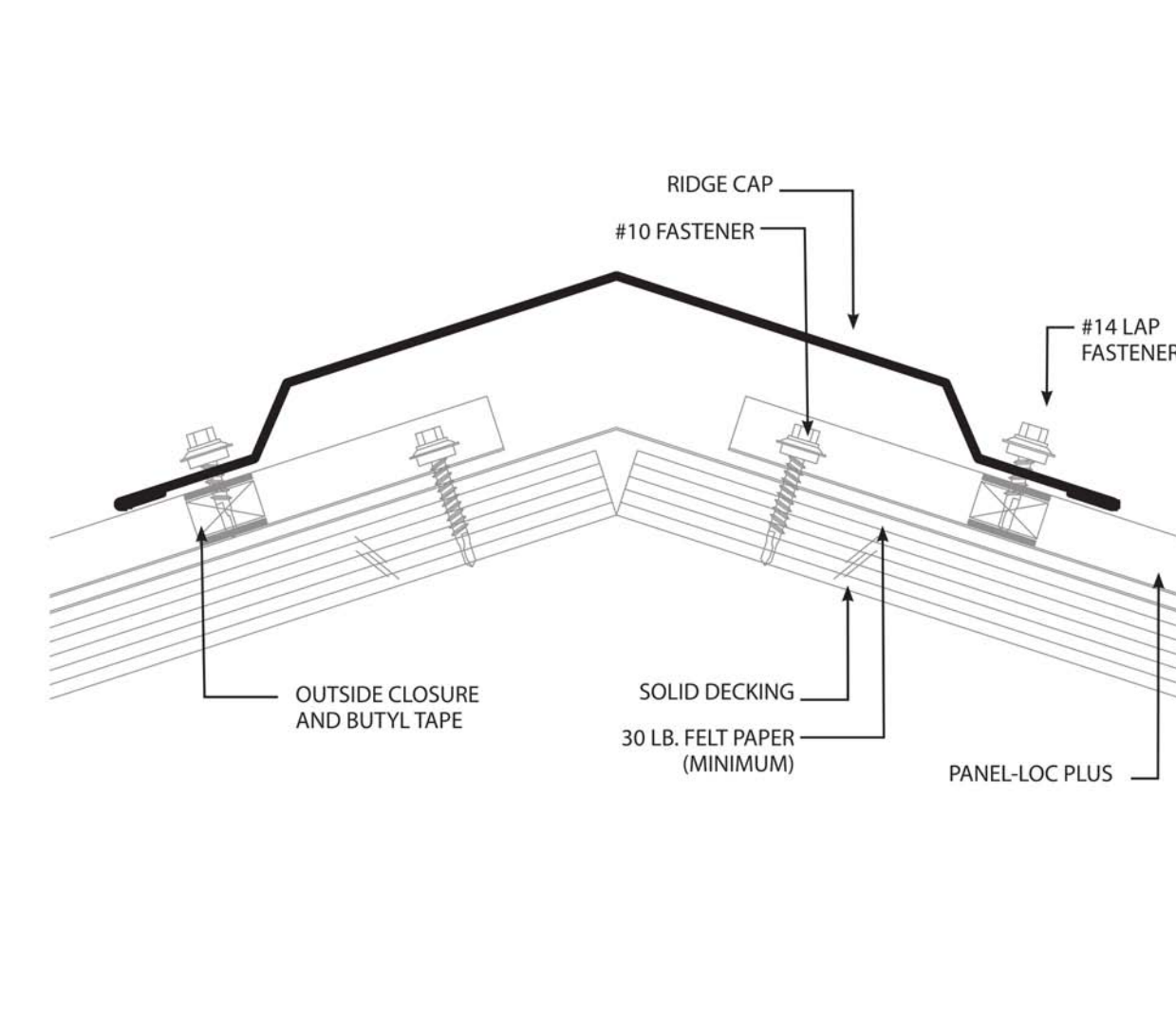
RESIDENTIAL RAKE
RRT1(color)



DIRECTIONS:

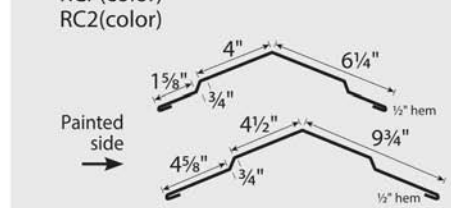
1. Install panel aligned with edge of roof.
2. Apply butyl tape to the leg of the RRT that will be fastened to the roof (the non-flat side). Extra width of butyl tape should be hidden inside the trim, rather than exposed to the weather. To apply, unroll butyl tape and stick to the trim. Leave backer on butyl tape until just prior to installation.
3. When ready to install the piece, peel the backer off of the butyl tape and align rake trim so that the face (flat side) of the RRT is against the fascia and the top of the RRT is at the same height as the panel rib.
4. Install fastener through the hem and butyl tape into the roof. Install another fastener into the face of the RRT and the fascia about an inch above the hem. Fasten the length of the trim following the fastener pattern established at panel installation.

RIDGE CAP



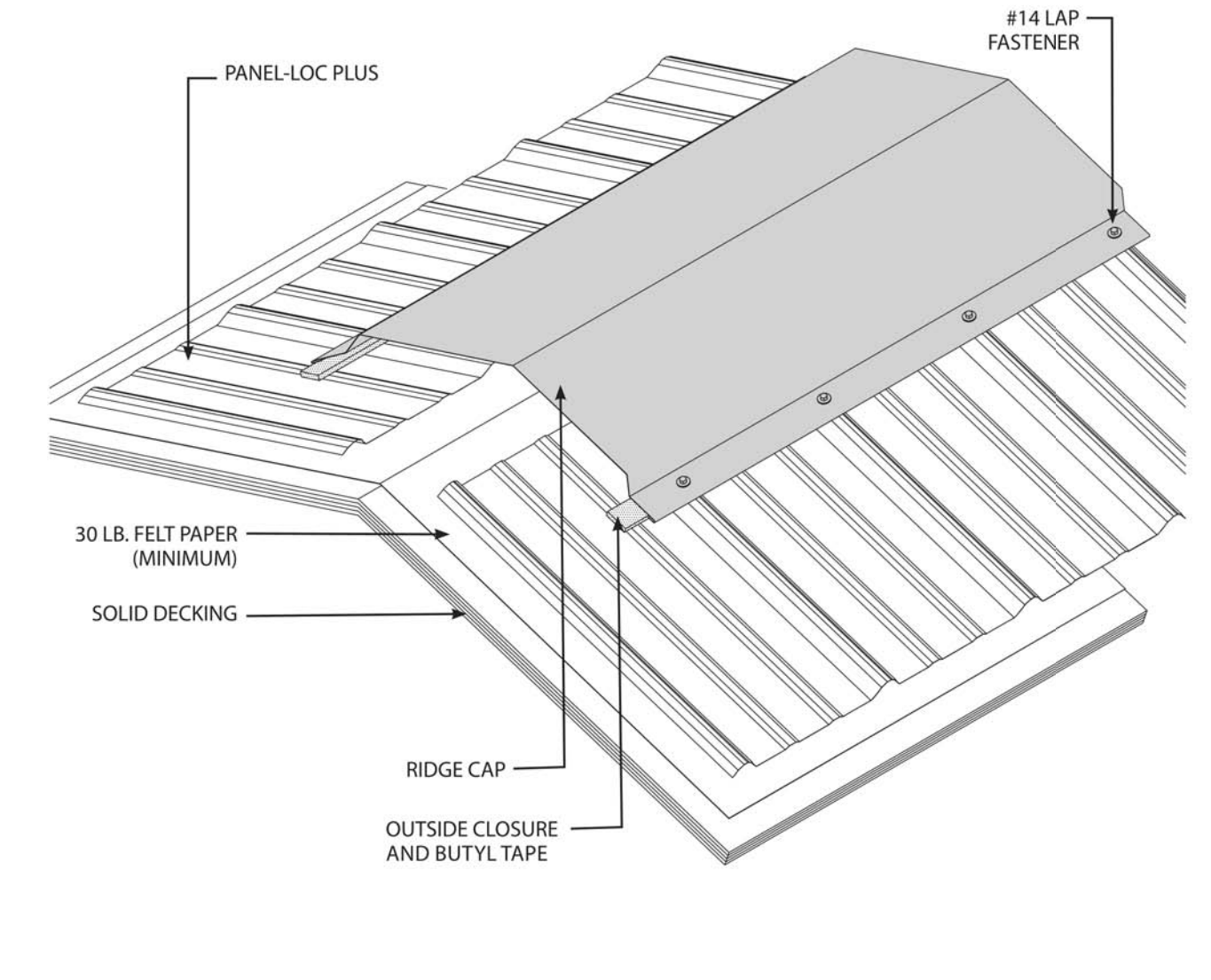
ILLUSTRATED TRIMS:

RIDGE CAP
RC1(color)
RC2(color)



Choose RCP for 6:12 or less
Choose RCP2 for all pitches

Specify pitch when ordering trim.



DIRECTIONS:

1. Before installing the RCP, the roof panels should be properly installed up to the peak of the roof. There should be a closure under the upper edge of each side of roof panels.
2. Before placing the RCP, place butyl tape on each side of roof panel where you will install outside closures so that when fasteners are used to secure the RCP, they will go through the closure into the rib of the panel. Install outside closure and place another run of butyl tape on top of the outside closure.
3. Place the RCP make sure the center of the ridge cap is in line with the peak of the roof.
4. Fasten the RCP to the panel at each rib down the entire length of the ridge. Lap screws are recommended for this portion of application. Remember the fasteners should go through the line of closure.

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Metal Roofing Details

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

NONE

SHEET:

A-5

CABINET SCHEDULE										
NUMBER	LABEL	QTY	FLOOR	WIDTH	DEPTH	HEIGHT	DESCRIPTION	CODE	MANUFACTURER	COMMENTS
C01		2	2	36 "	36 "	36 "	CORNER BASE CABINET			
C02	B30	1	2	30 "	24 "	36 "	BASE CABINET			
C03	B46	1	2	46 1/4 "	24 "	36 "	BASE CABINET			
C04	DCIN2D2448R	2	2	24 "	24 "	48 "	CORNER WALL CABINET			
C05	SB33	1	2	33 "	24 "	36 "	BASE CABINET			
C06	U332484	1	2	33 "	24 "	84 "	UTILITY CABINET			
C07	U362484	1	2	36 "	24 "	84 "	UTILITY CABINET			
C08	W1230R	1	2	12 "	12 "	30 "	WALL CABINET			
C09	W20306L	1	1	20 "	6 "	30 "	WALL CABINET			
C10	W3027	2	2	30 "	12 "	27 "	WALL CABINET			
C11	WFB324	1	2	33 "	12 "	24 "	PENINSULA WALL CABINET			

WINDOW SCHEDULE											
NUMBER	LABEL	QTY	FLOOR	SIZE	WIDTH	HEIGHT	R/O	DESCRIPTION	HEADER	MANUFACTURER	COMMENTS
W01	2032DH	1	2	2032DH	23 3/4 "	37 3/4 "	24"X38"	DOUBLE HUNG	2X6X27" (2)	RELIABIL 3900	
W02	3046DH RELIABIL 3900 ROUGH OPENING: 36" X 53.75"	5	2	3046DH	35 3/4 "	53 1/2 "	36"X53 3/4"	DOUBLE HUNG	2X6X39" (2)	RELIABIL 3900	
W04	2846DH	3	2	2846DH	31 3/4 "	53 1/2 "	32"X53 3/4"	DOUBLE HUNG	2X6X35" (2)	RELIABIL 3900	
W07	3046DH RELIABIL 3900 ROUGH OPENING: 36" X 53.75"	4	1	3046DH	35 3/4 "	53 1/2 "	36"X53 3/4"	DOUBLE HUNG	2X6X39" (2)		

ROOM FINISH SCHEDULE										
ROOM NAME	AREA, INTERIOR (SQ FT)	CEILING HEIGHT	WALL MATERIAL	FLOOR FINISH	CEILING FINISH	BASE MOLDING	WINDOW CASING	WINDOW SILL	DOOR CASING	
CONFERENCE	344	109 1/8"	DRYWALL	OAK 3-4-5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK	STOCK	STOCK	STOCK	
BATH	53	109 1/8"	DRYWALL	LIMESTONE TILES, THINSET MORTAR, BACKERBOARD 1/4"	DRYWALL, COLOR - BONE	STOCK				
OFFICE 1	138	109 1/8"	DRYWALL	CARPET-23 DARK SADDLE, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				
OFFICE 2	137	109 1/8"	DRYWALL	CARPET-23 DARK SADDLE, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK	STOCK	STOCK	STOCK	
STAIRWELL	42	22'1"		LIGHT - MP PLANK, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE					
STORAGE	51	109 1/8"	DRYWALL	WHITE-BLACK2 TILE, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
KITCHEN	116	109 1/8"	DRYWALL	LIGHT - MP PLANK, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK	STOCK			
SUPPLIES	12	109 1/8"	DRYWALL	OAK 3-4-5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
CLOSET 1	14	109 1/8"	DRYWALL	OAK 3-4-5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
CLOSET 2	18	109 1/8"	DRYWALL	OAK 3-4-5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
COAT	4	109 1/8"	DRYWALL	OAK 3-4-5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
SHOWER	12	109 1/8"	BACKERBOARD 1/2"	AQUA MOSAIC TILE, FOAM UNDERLAYMENT	DRYWALL, COLOR - BONE	STOCK				STOCK
TOTALS:	941									

FIXTURE SCHEDULE										
NUMBER	LABEL	QTY	FLOOR	WIDTH	DEPTH	HEIGHT	DESCRIPTION	CODE	MANUFACTURER	COMMENTS
A01	ADA TOILET	1	1	30 "	36 "	29 7/8 "	ADA TOILET			
A02	ADA TOILET	1	2	30 "	36 "	29 7/8 "	ADA TOILET			
A03	BASIC SINGLE TOWEL BAR	1	2	20 "	5 7/16 "	14 5/16 "	BASIC SINGLE TOWEL BAR			
A04	BASIC TOILET PAPER HOLDER	1	2	4 "	4 3/4 "	5 5/8 "	BASIC TOILET PAPER HOLDER			
A05	BOTTOM MOUNT REFRIGERATOR 3	1	2	33 "	25 1/8 "	68 13/16 "	BOTTOM MOUNT REFRIGERATOR 3			
A06	DC BREAKER BOX	6	1	7 1/2 "	5 9/16 "	11 "	DC BREAKER BOX			LONES ITEM # 95550 MODEL # DPF221RP EATON 30-AMP FUSIBLE METALLIC AC 13.63
A07	DC BREAKER BOX SOLAR DISCONNECT	1	1	7 1/2 "	5 9/16 "	11 "	DC BREAKER BOX			SOLAR DISCONNECT (FUTURE CONNECTION)
A08	DISHWASHER (PANEL)	1	2	23 3/4 "	23 "	30 1/2 "	DISHWASHER (PANEL)			
A09	DOUBLE SINK	1	2	35 7/8 "	22 "	20 3/16 "	DOUBLE SINK			
A10	ELECTRIC CERAMIC TOP RANGE	1	2	30 "	28 "	44 "	ELECTRIC CERAMIC TOP RANGE			
A11	EXTERIOR VENT EXHAUST HOOD	1	2	4 "	13 11/16 "	4 "	EXTERIOR VENT EXHAUST HOOD			
A12	EXTERIOR VENT EXHAUST HOOD	1	2	4 "	3 "	4 "	EXTERIOR VENT EXHAUST HOOD			
A13	FUJI MINI-SPLIT AC INSIDE UNIT 9RL53Y 9,000 BTU	2	1	37 "	10 5/8 "	11 5/8 "	SANYO MINI-SPLIT AIR CONDITIONER INSIDE UNIT 14-08-20			9RL53Y 9,000 BTU WALL MOUNT INVERTER DRIVEN HEAT PUMP
A14	FUJI MINI-SPLIT AC OUTSIDE UNIT 9RL53Y 9K BTU INVERTER DRIVEN HEAT PUMP	3	1	34 1/2 "	11 15/16 "	24 7/16 "	SANYO MINI-SPLIT AIR CONDITIONER OUTSIDE UNIT14-08-20			FUJI MINI-SPLIT AC OUTSIDE UNIT 9RL53Y 9K BTU INVERTER DRIVEN HEAT PUMP
A15	FUJI MINI-SPLIT AC OUTSIDE UNIT 9RL53Y 9K BTU INVERTER DRIVEN HEAT PUMP	3	1	36 "	11 15/16 "	24 "	SANYO MINI-SPLIT AIR CONDITIONER OUTSIDE UNIT14-08-20			FUJI MINI-SPLIT AC OUTSIDE UNIT 9RL53Y 9K BTU INVERTER DRIVEN HEAT PUMP
A16	GARAGE DOOR OPENER	1	1	28 9/16 "	115 "	25 15/16 "	GARAGE DOOR OPENER			
A17	GARAGE DOOR OPENER	1	1	28 9/16 "	119 "	25 15/16 "	GARAGE DOOR OPENER			
A18	HOSE BIBB	3	1	2 7/16 "	3 5/16 "	2 11/16 "	HOSE BIBB			
A19	HOSE BIBB	2	2	2 7/16 "	3 5/16 "	2 11/16 "	HOSE BIBB			
A20	MEDIUM ELEC WH	1	1	23 "	21 "	68 "	MEDIUM ELEC WH			
A21	MICRO LOUVER VENT	1	2	4 "	4 1/8 "	4 "	MICRO LOUVER VENT			
A22	PEDESTAL SINK 05	1	1	22 3/16 "	20 3/4 "	41 1/4 "	PEDESTAL SINK 05			
A23	SANYO MINI-SPLIT AIR CONDITIONER INSIDE UNIT 14-08-20	4	2	32 1/2 "	7 7/16 "	11 1/4 "	SANYO MINI-SPLIT AIR CONDITIONER INSIDE UNIT 14-08-20			
A24	SINGLE BASIN LAUNDRY SINK	1	1	40 "	23 9/16 "	48 7/8 "	SINGLE BASIN LAUNDRY SINK			ITEM # 117328 MODEL # 21F
A25	STAMPED 90	1	1	6 3/8 "	6 7/16 "	3 "	STAMPED 90			MUSTEE 40-IN X 24-IN 2-BASIN WHITE FREESTANDING POLYPROPYLENE UTILITY SINK WITH DRAIN

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Cabinet, Window, Door, and
Finish Schedules

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

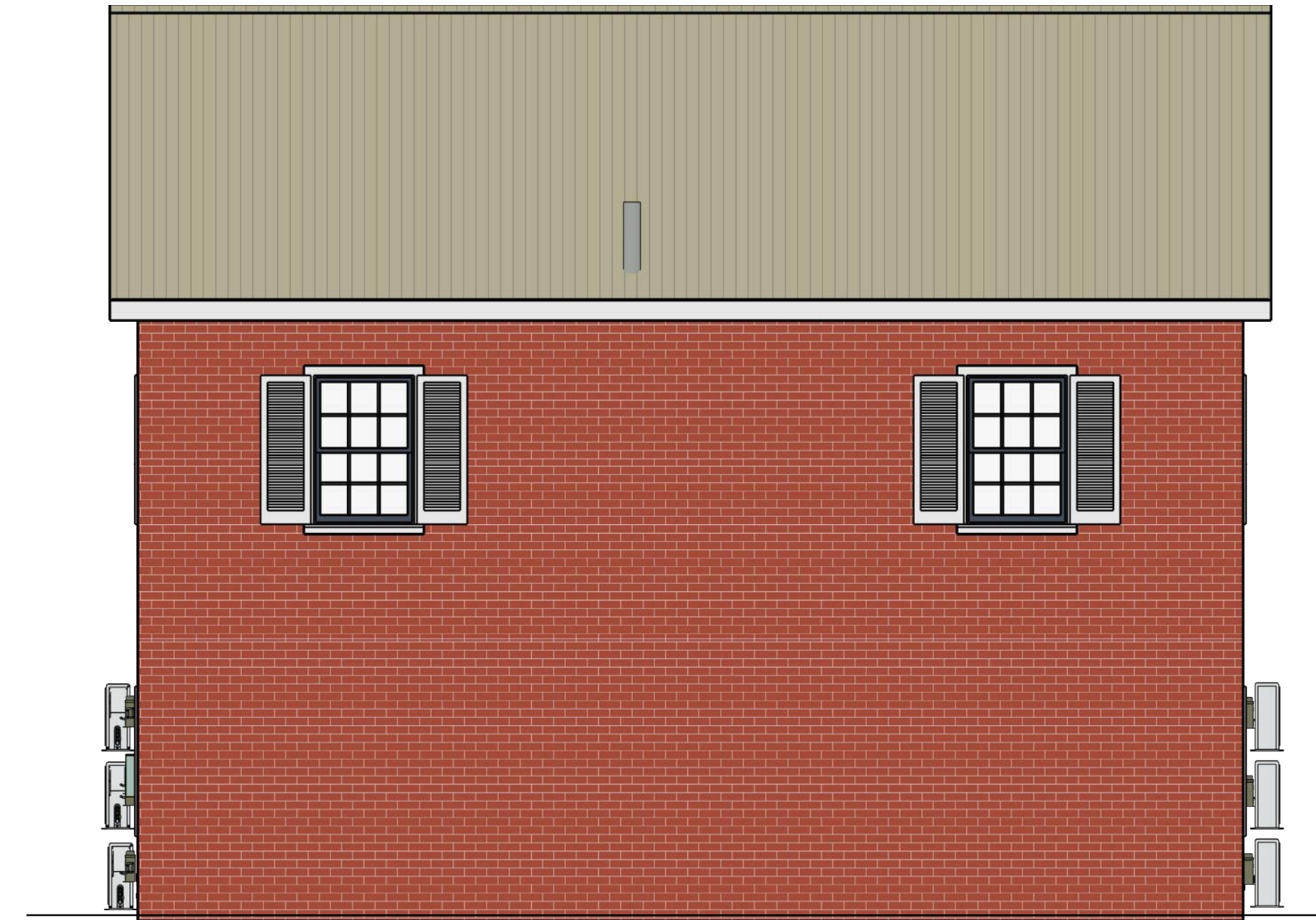
NONE

SHEET:

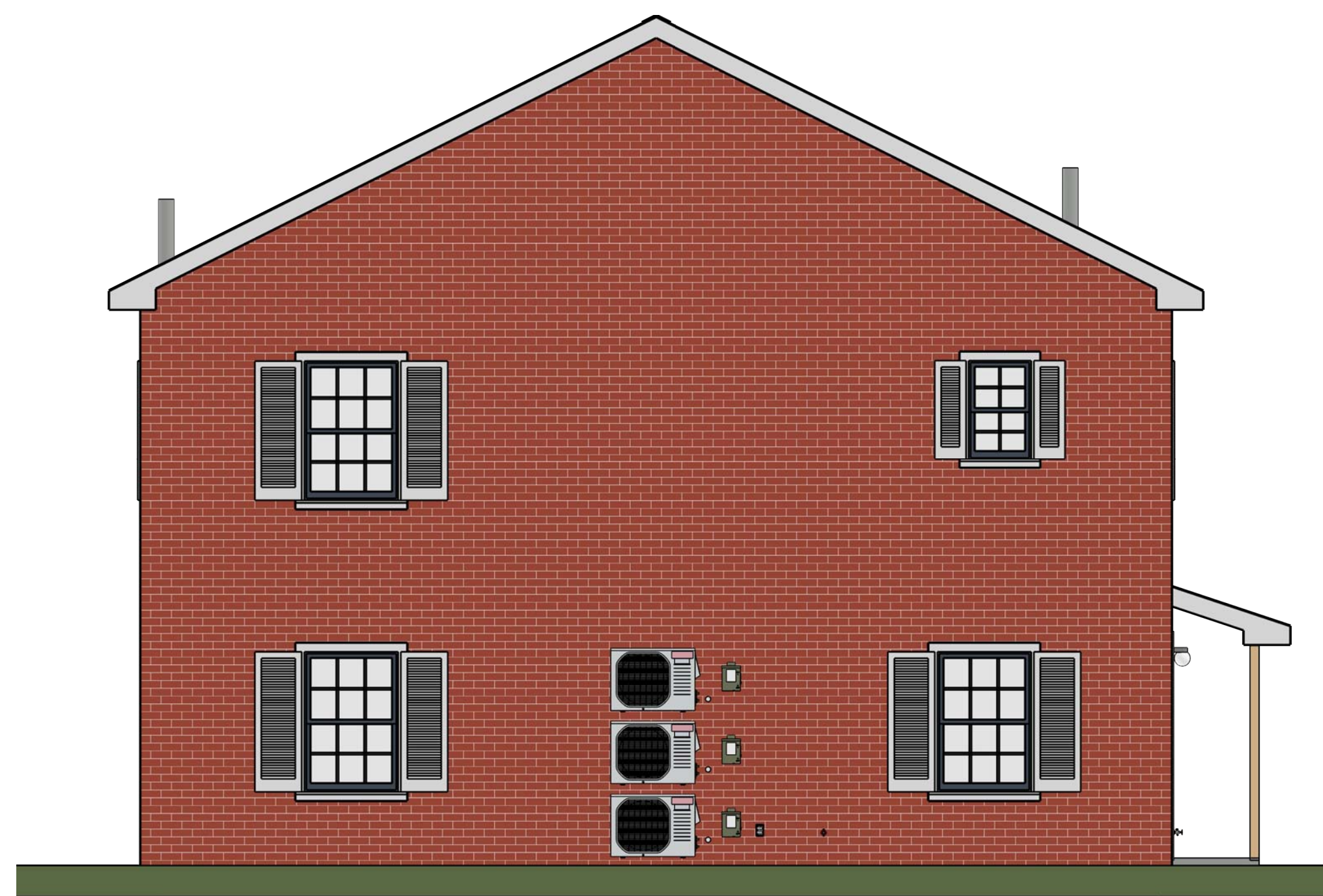
A-6



Front Elevation



Rear Elevation



Left Elevation



Right Elevation

REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Exterior Elevations

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

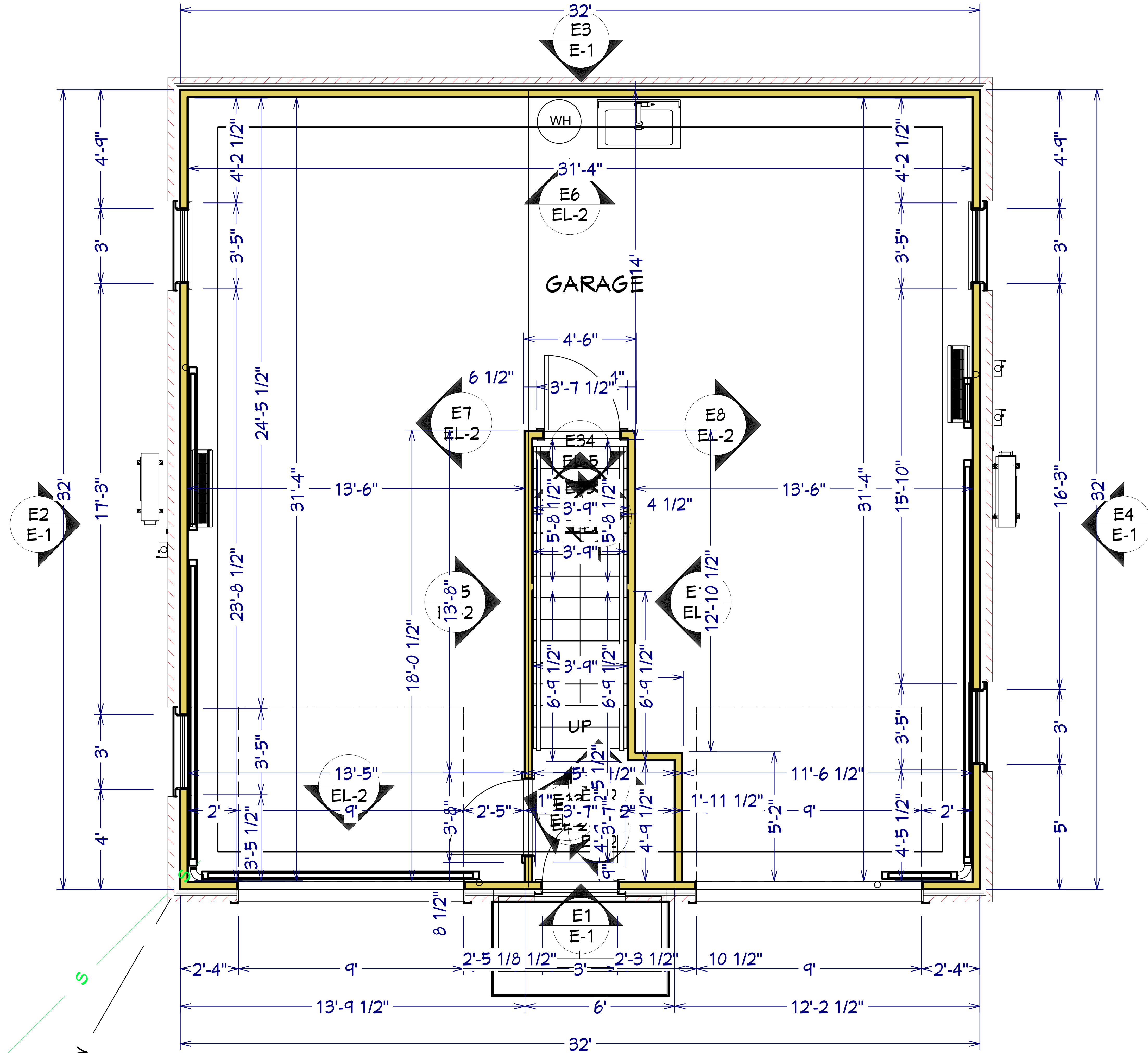
1/18/2021

SCALE:

1/4" = 1'

SHEET:

EL-0



REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

1st Floor Plan for Elevations

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

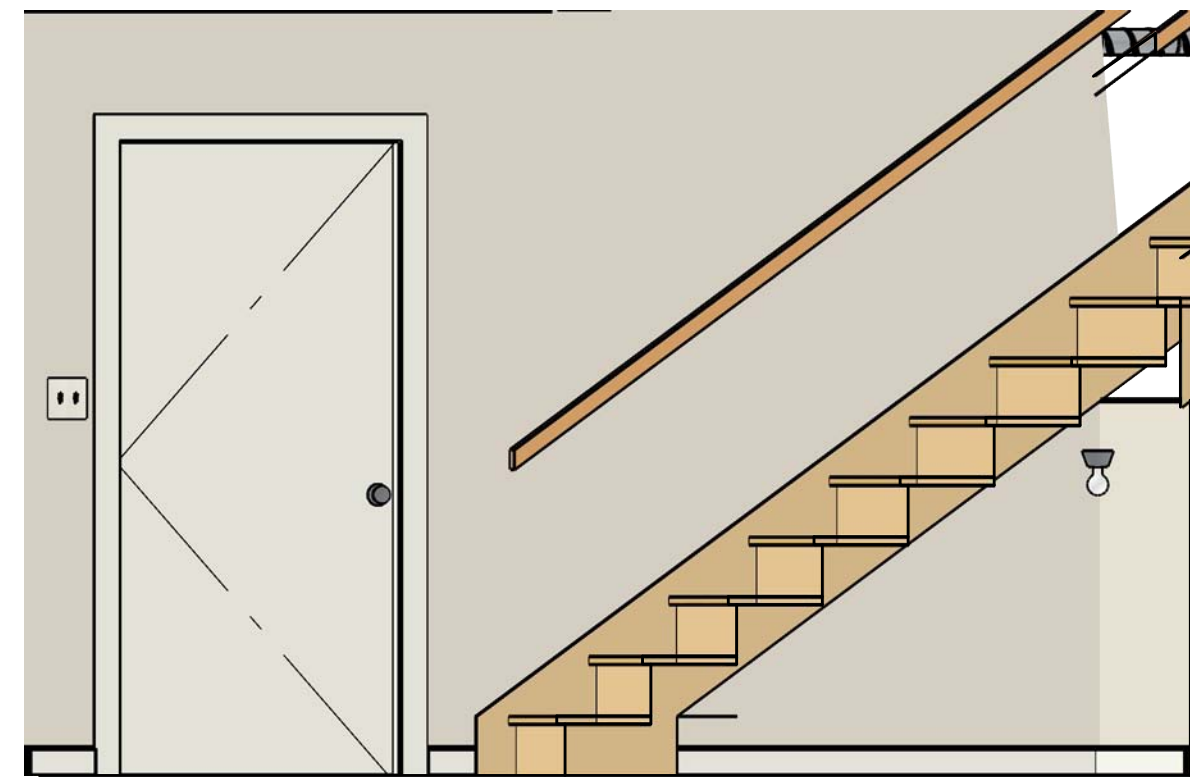
1/18/2021

SCALE:

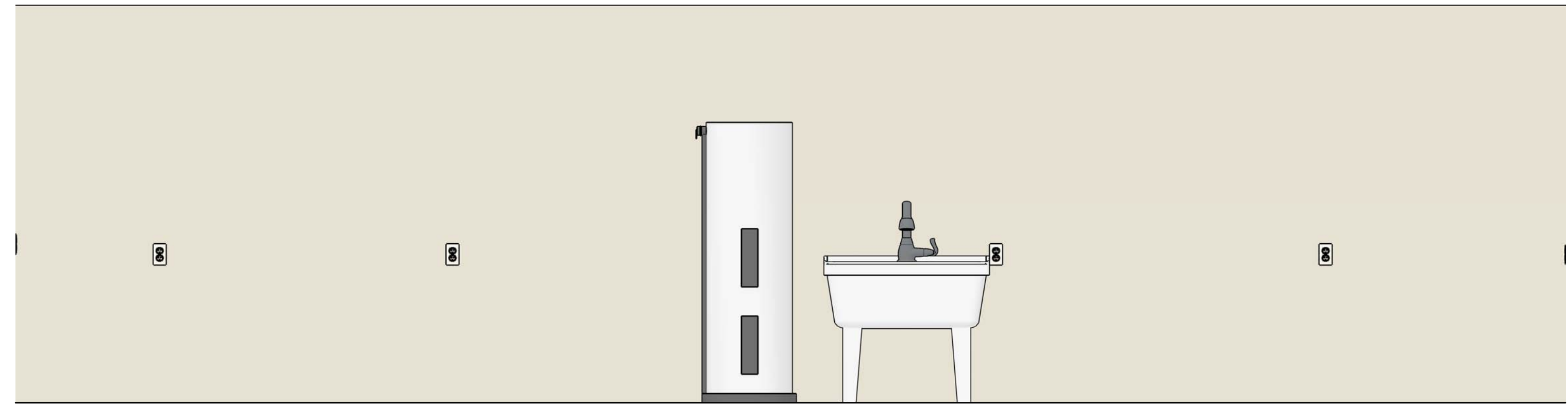
1/2" = 1'

SHEET:

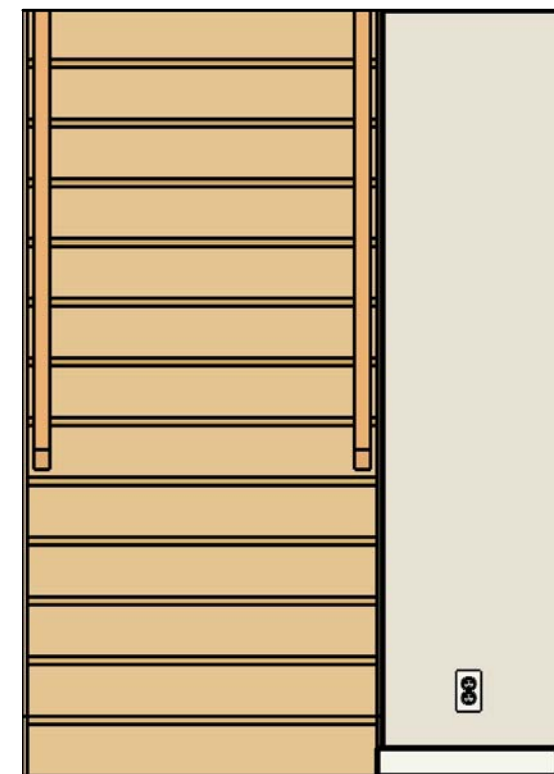
EL-1



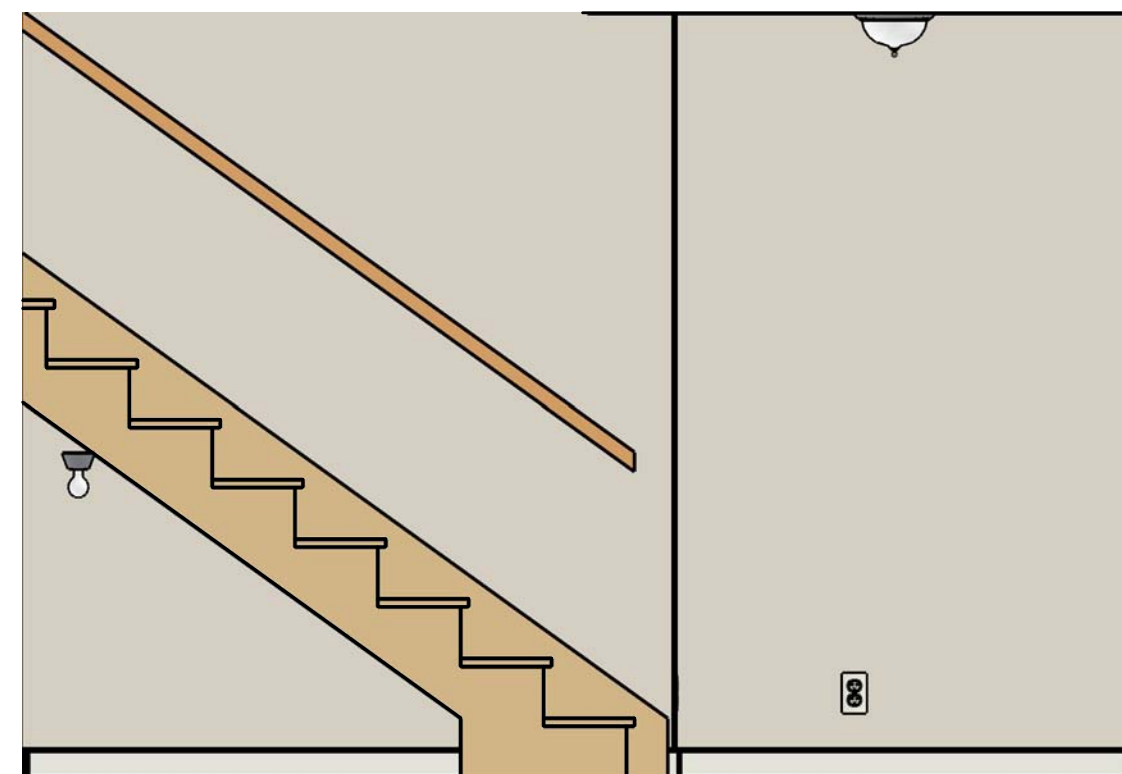
E12 Lobby West



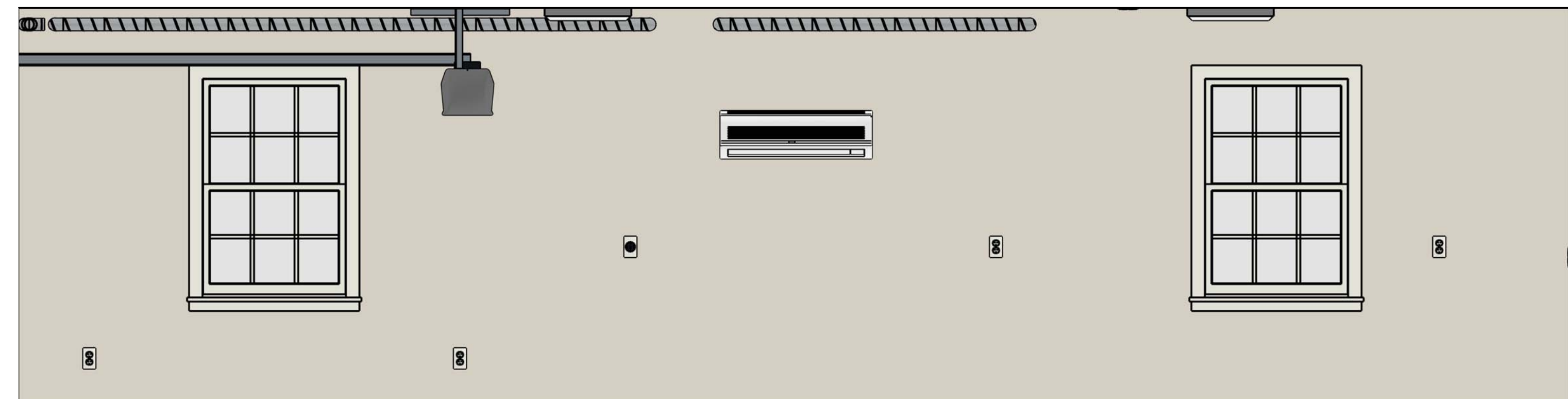
E6 South Interior Elevation



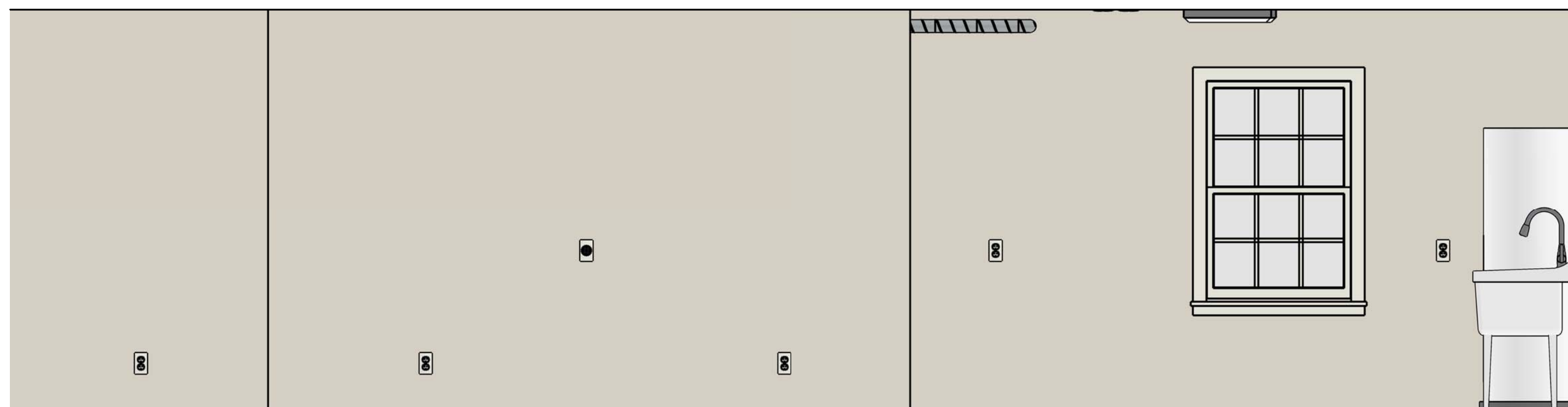
E11 Lobby South



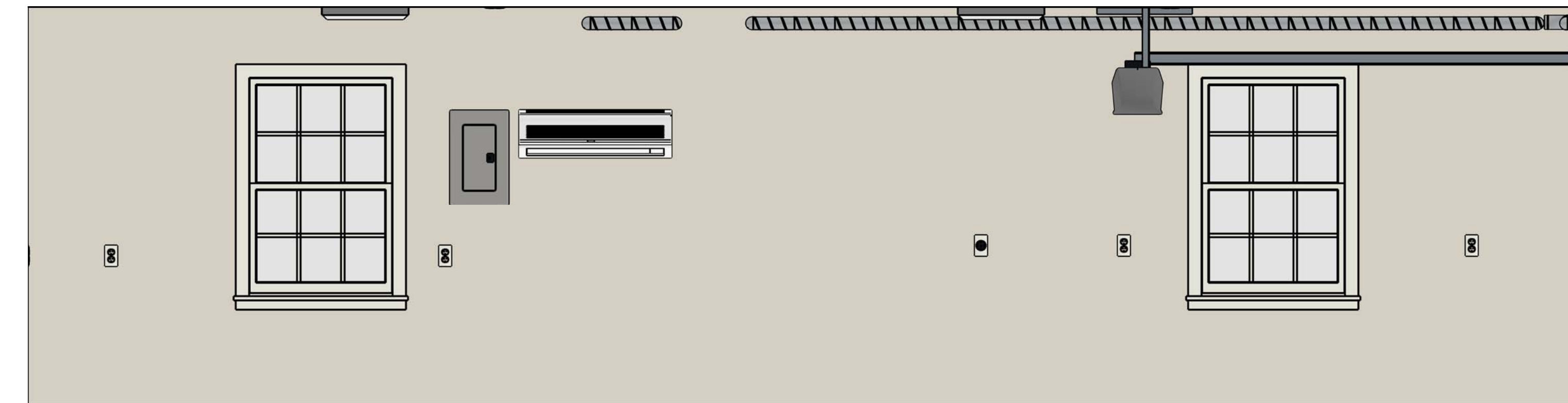
E13 Lobby East



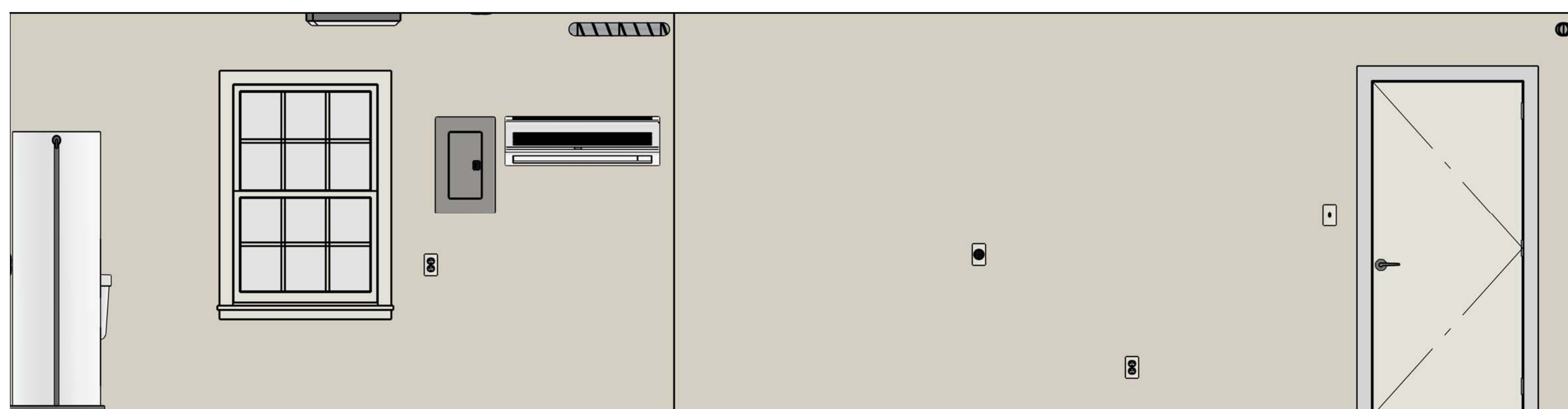
E7 West Interior Elevation



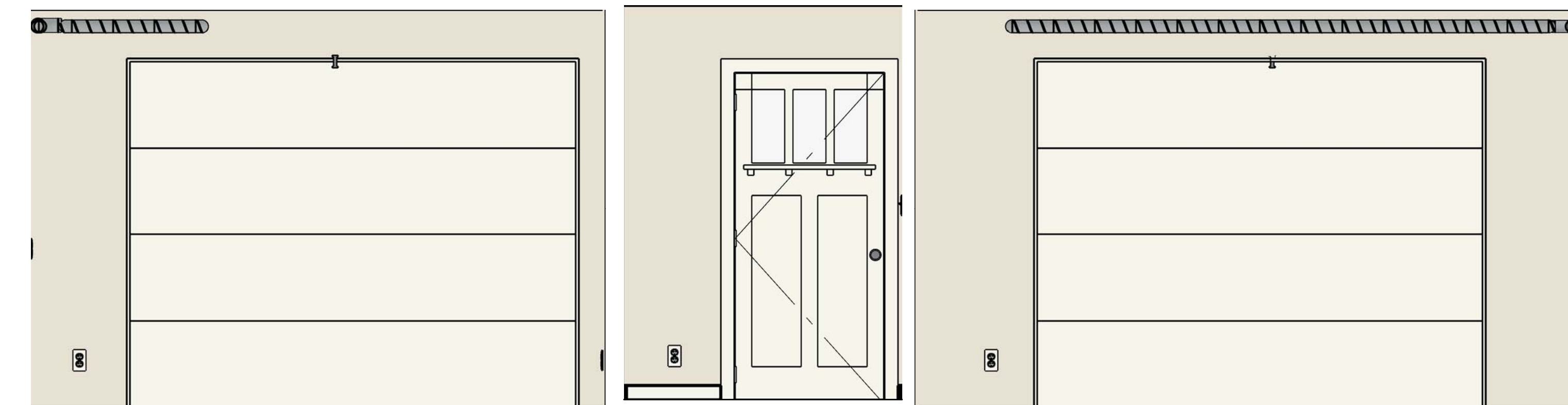
E14 Interior Stairwell East



E8 East Interior Elevation



E15 Interior Stairwell West



E10 North Interior Elevation

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

1st Floor Interior Elevations

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

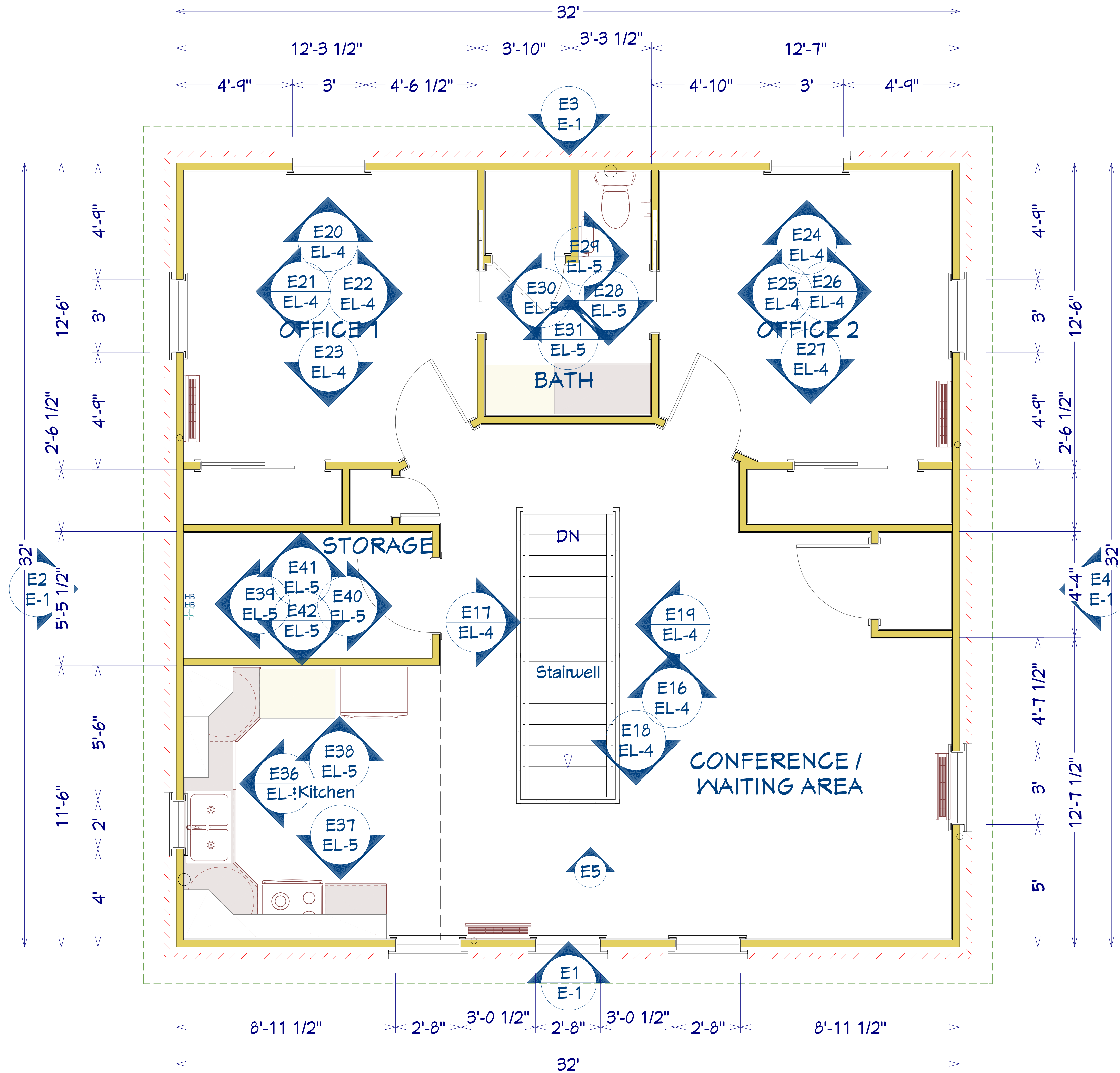
1/18/2021

SCALE:

1/2" = 1'

SHEET:

EL-2



REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

2nd Floor Plan

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

SCALE:

1/2" = 1'

SHEET:

EL-3

Conference Waiting Area

Scale 1/2" = 1'

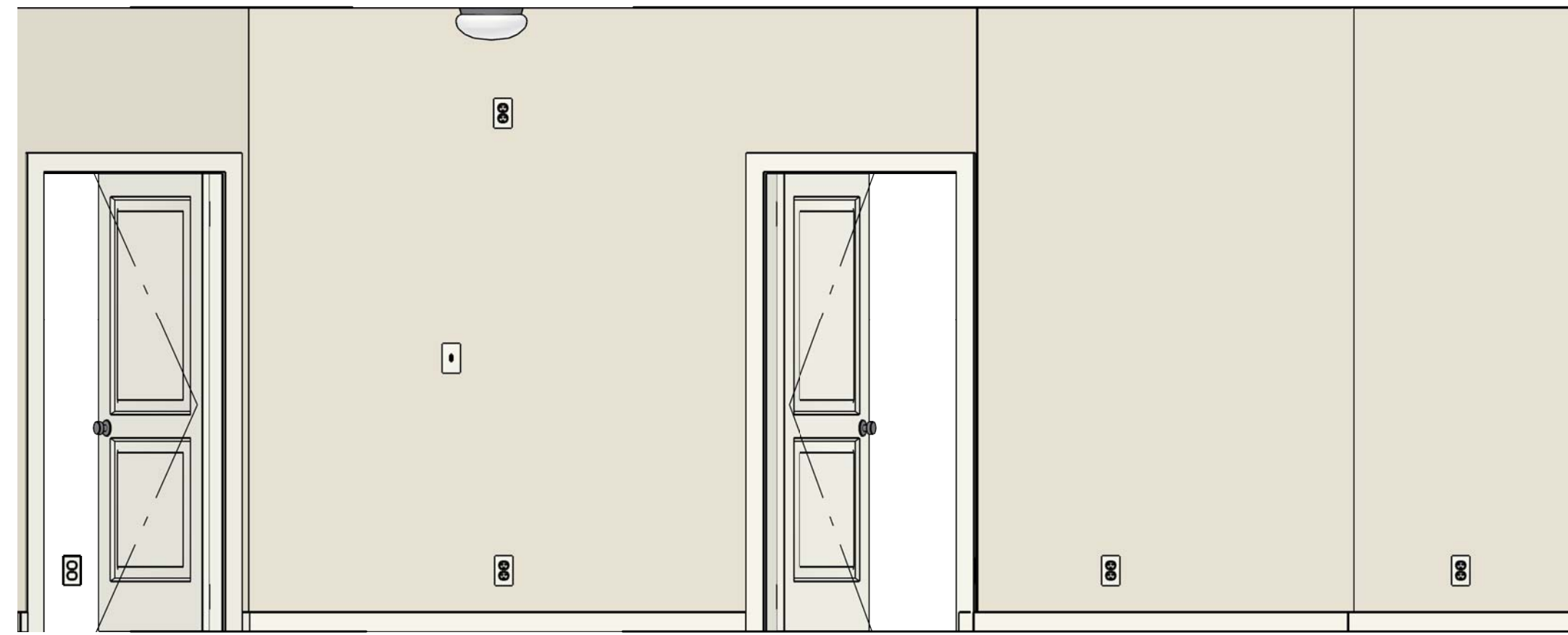


E19

E18



Scale 1/2" = 1'



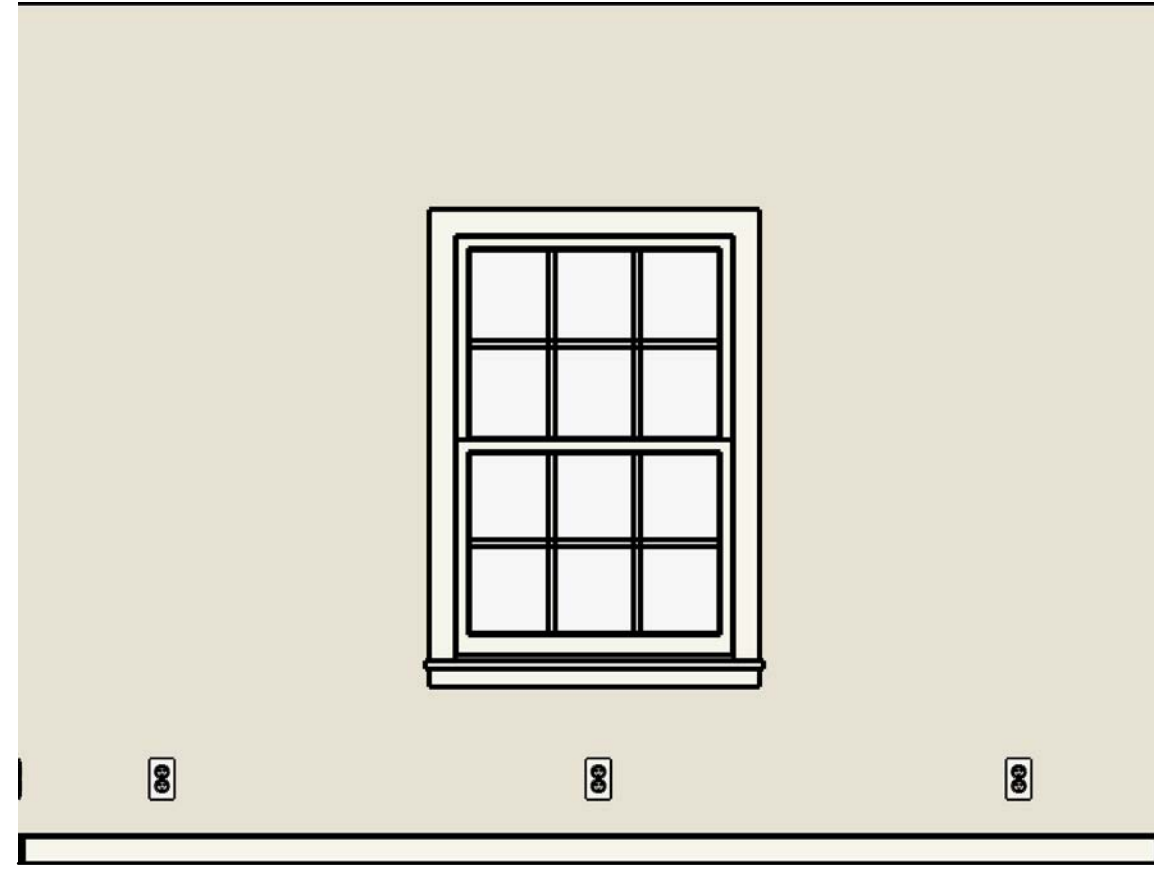
E16

E17

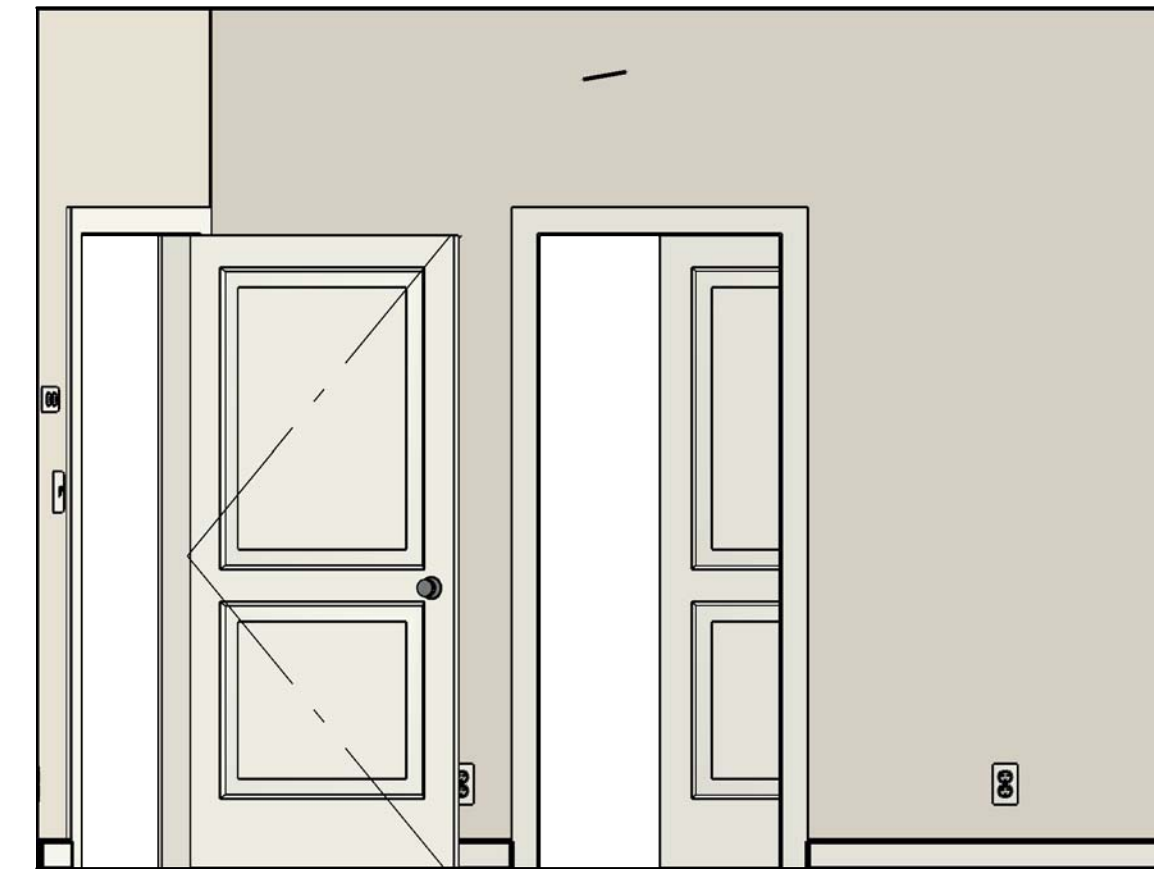


OFFICE 2

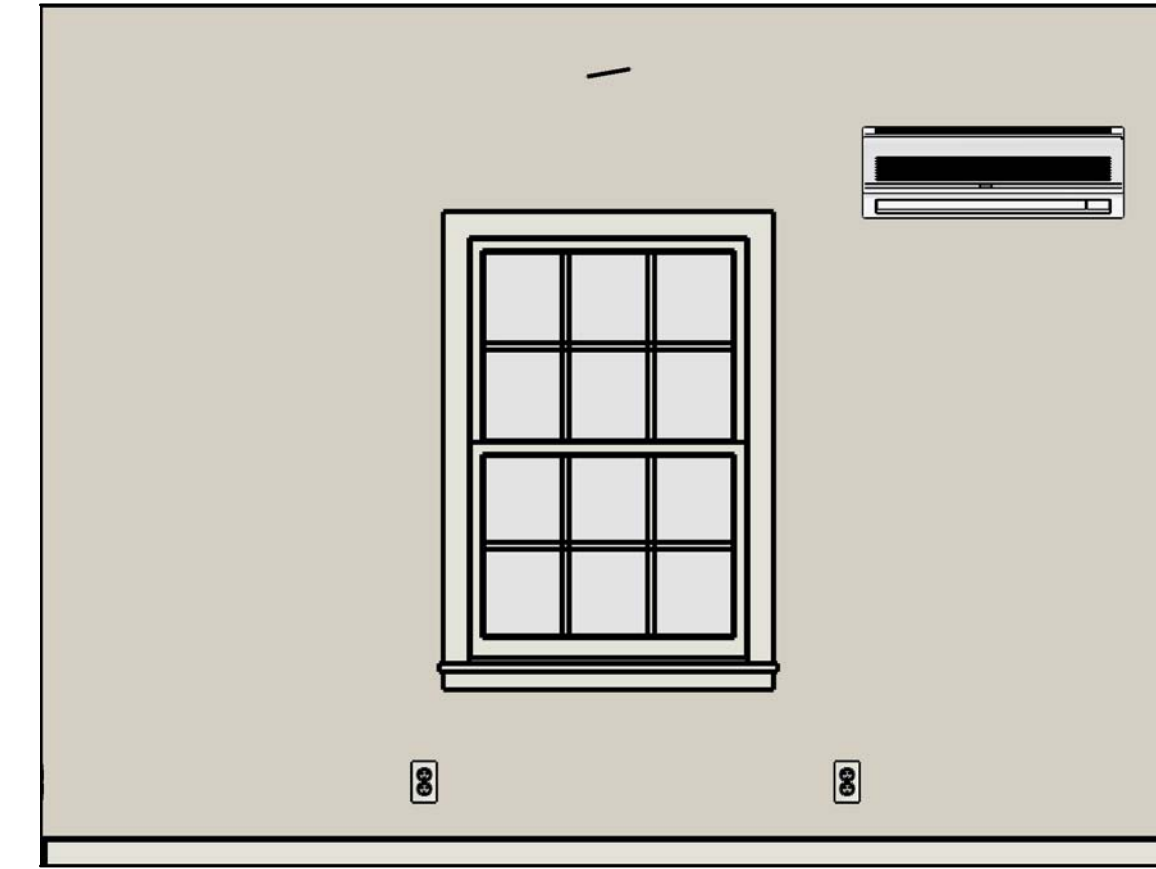
Scale 1/2" = 1'



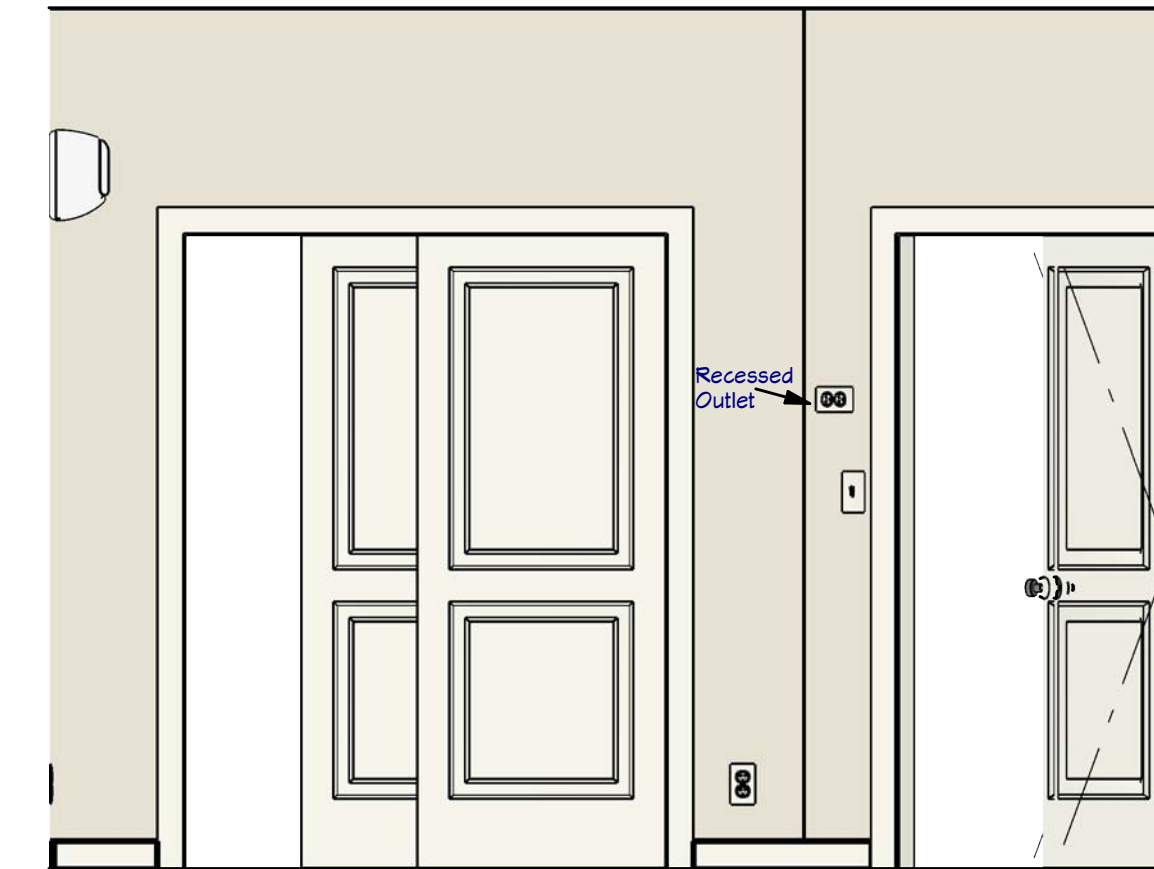
E24



E25



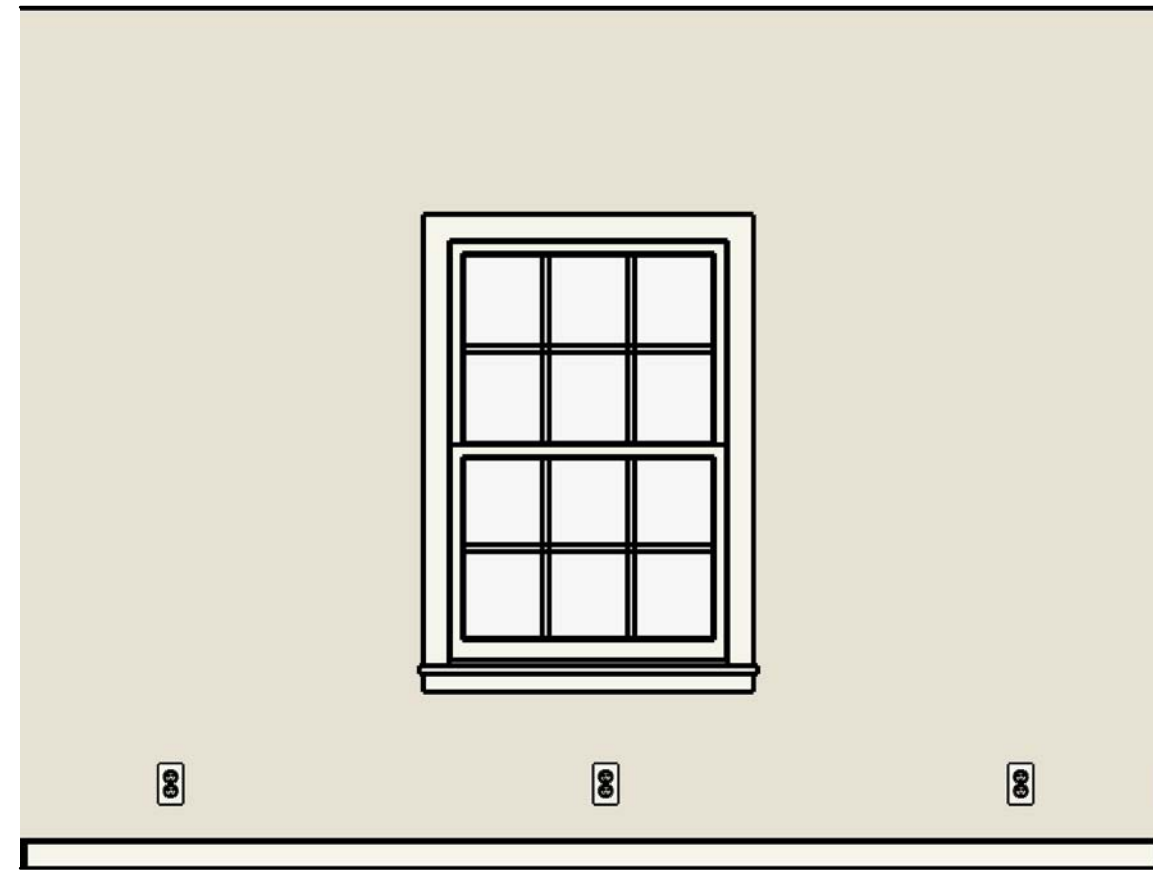
E26



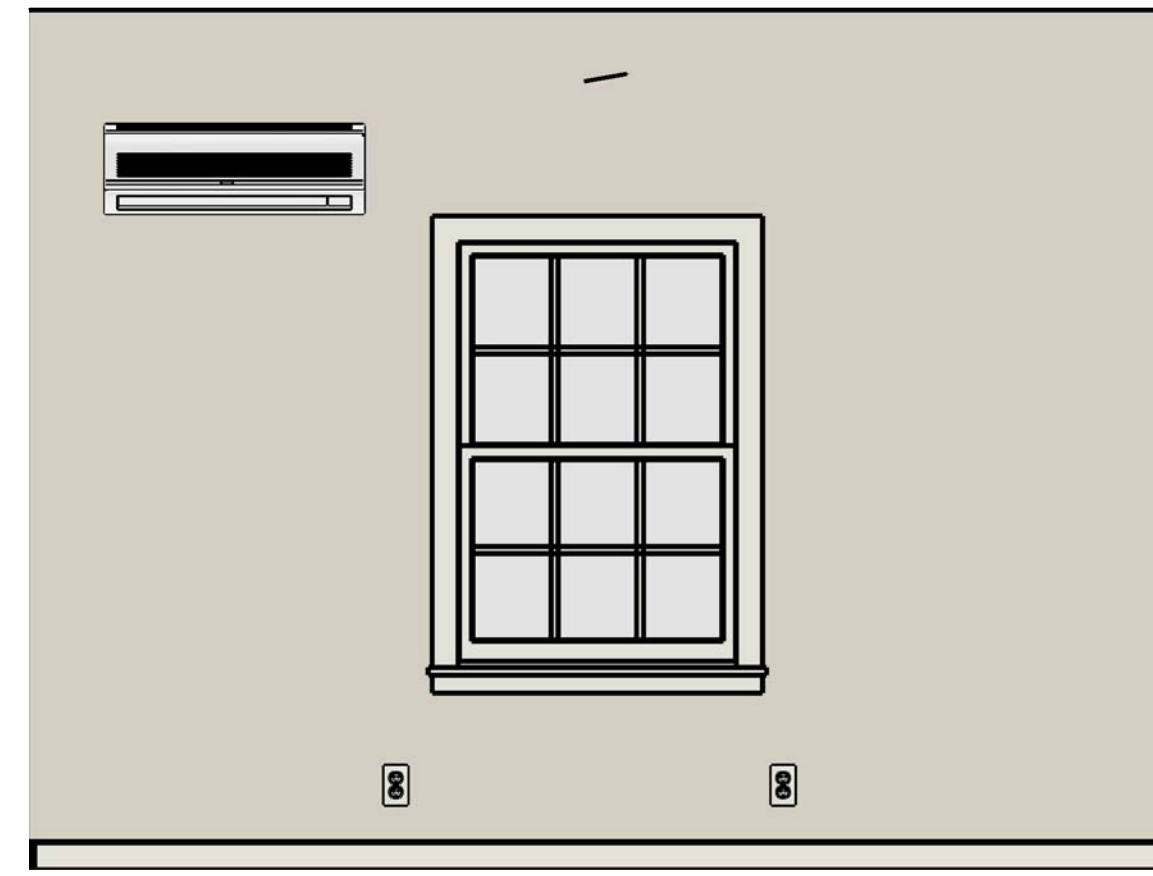
E27

OFFICE 1

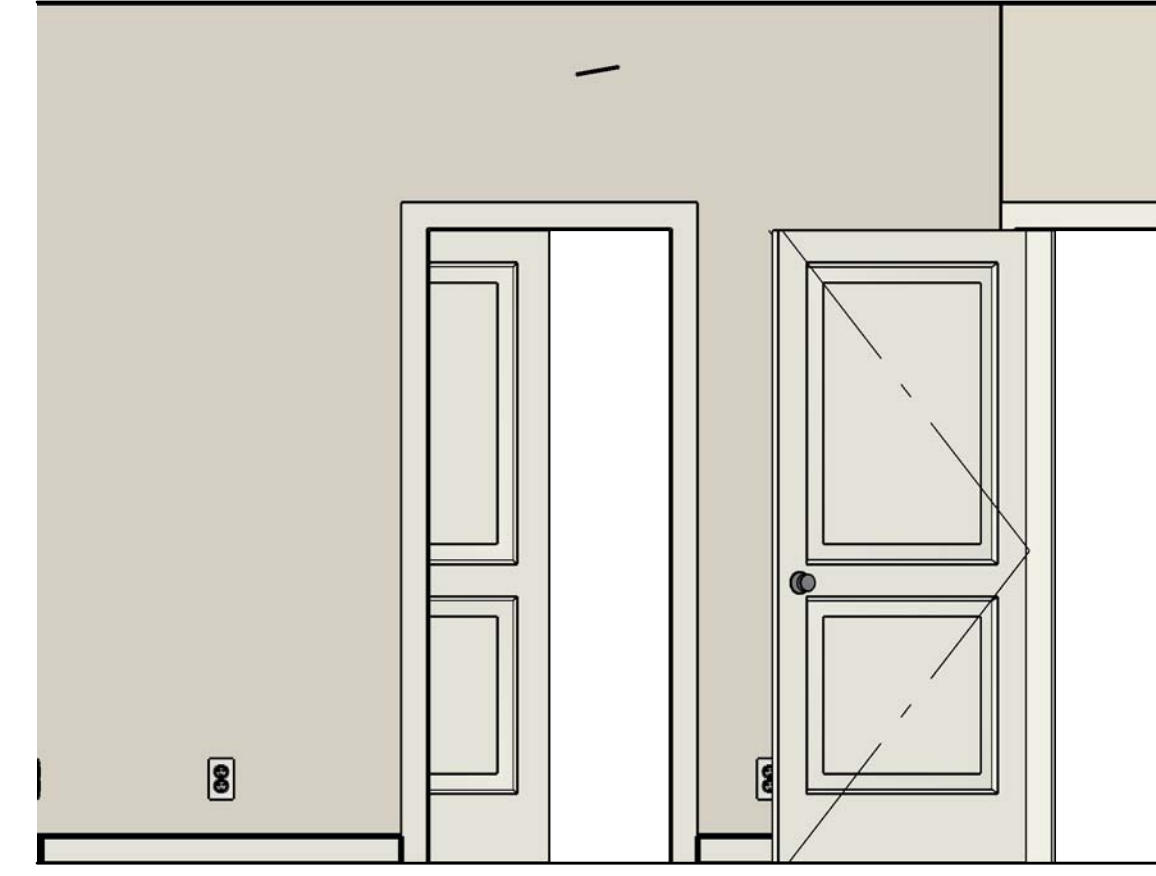
Scale 1/2" = 1'



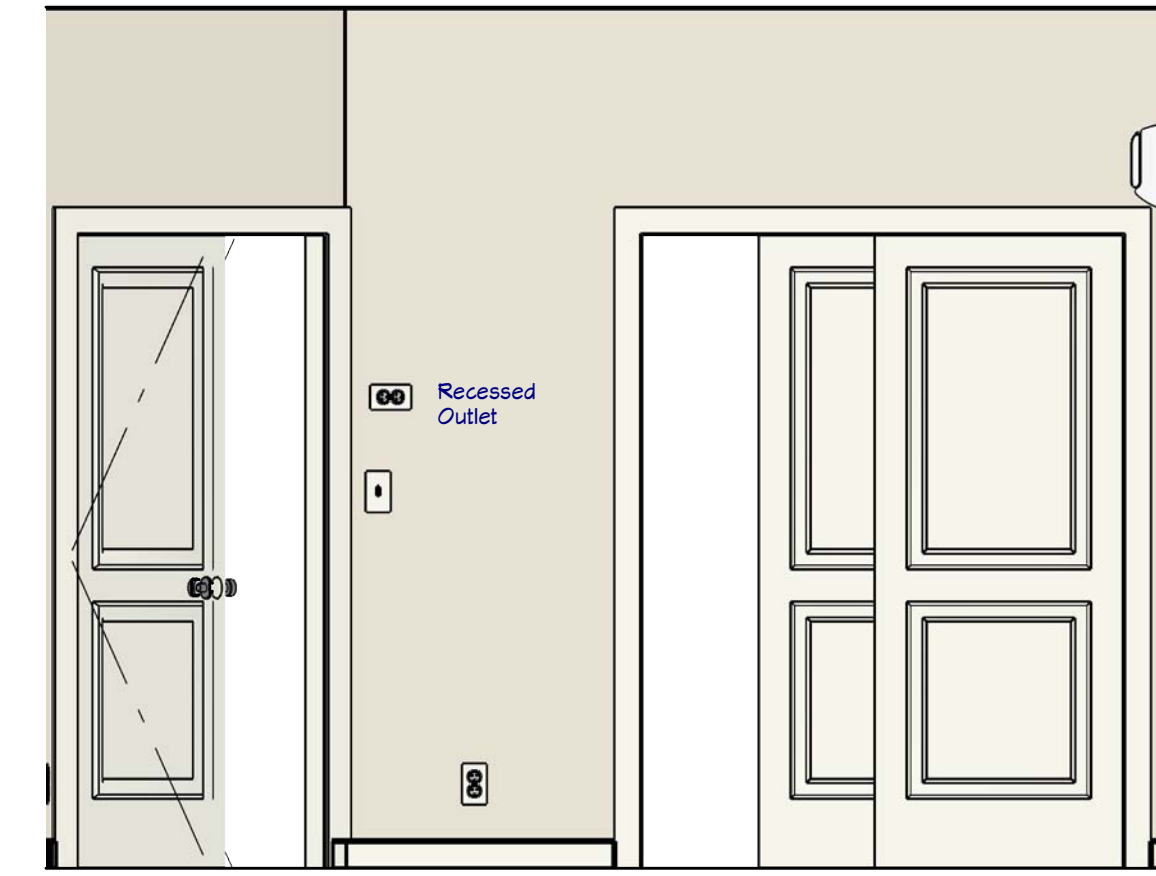
E20



E21



E22



E23

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

1/2" = 1'

SHEET:

EL-4

ROOM ELEVATIONS

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

NUMBER	DATE	REVISION	DESCRIPTION

**2nd Floor
BATHROOM**

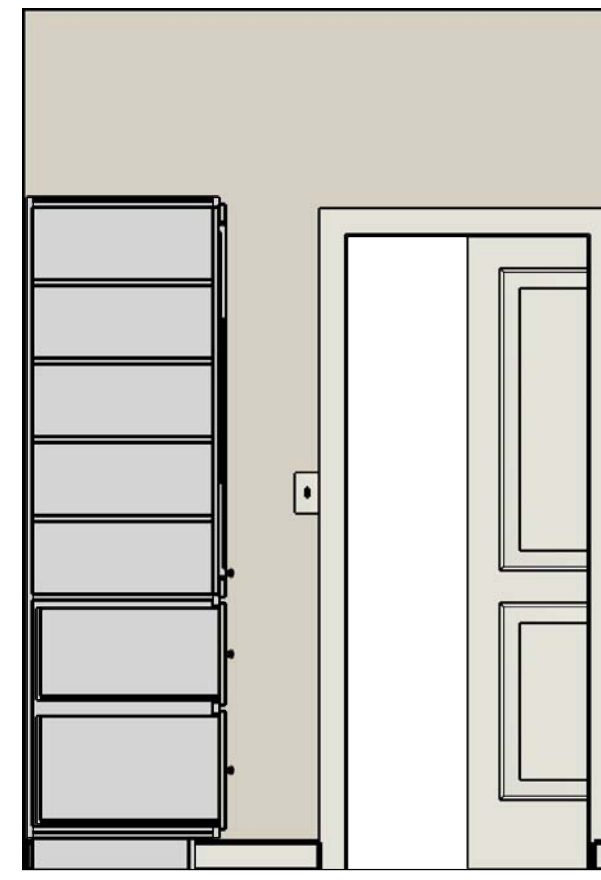
Scale 1/2" = 1'



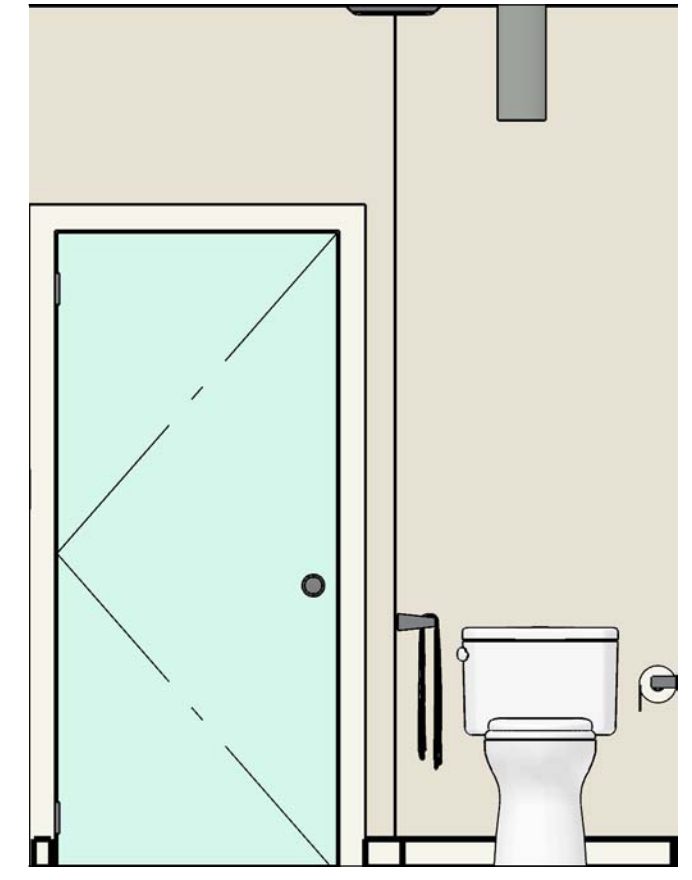
Elevation 29



Elevation 28



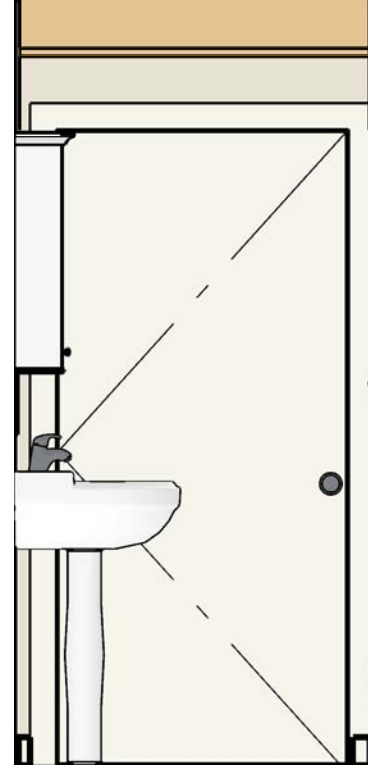
Elevation 30



Elevation 31

**1st Floor
BATHROOM**

Scale 1/2" = 1'



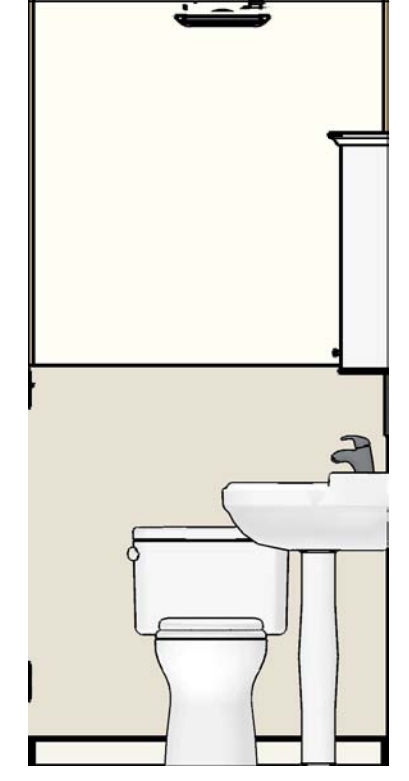
Elevation 35



Elevation 33



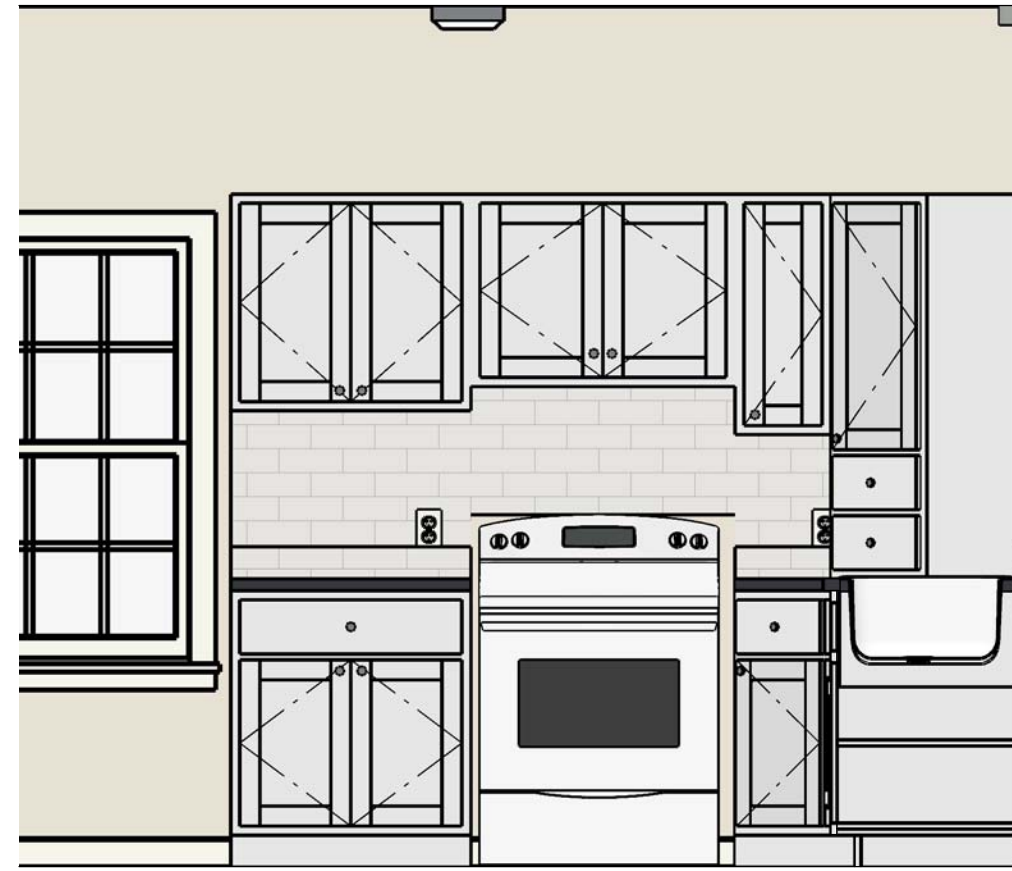
Elevation 32



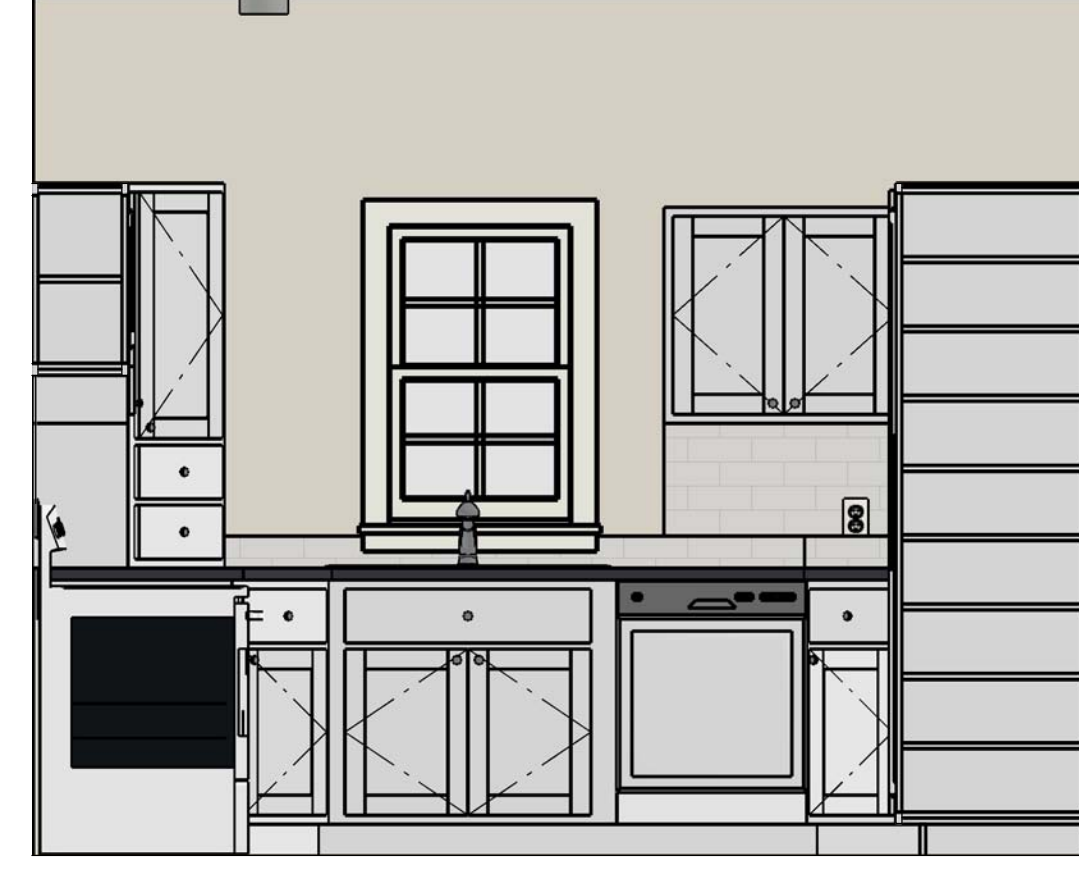
Elevation 34

Kitchen

Scale 1/2" = 1'



Elevation 37



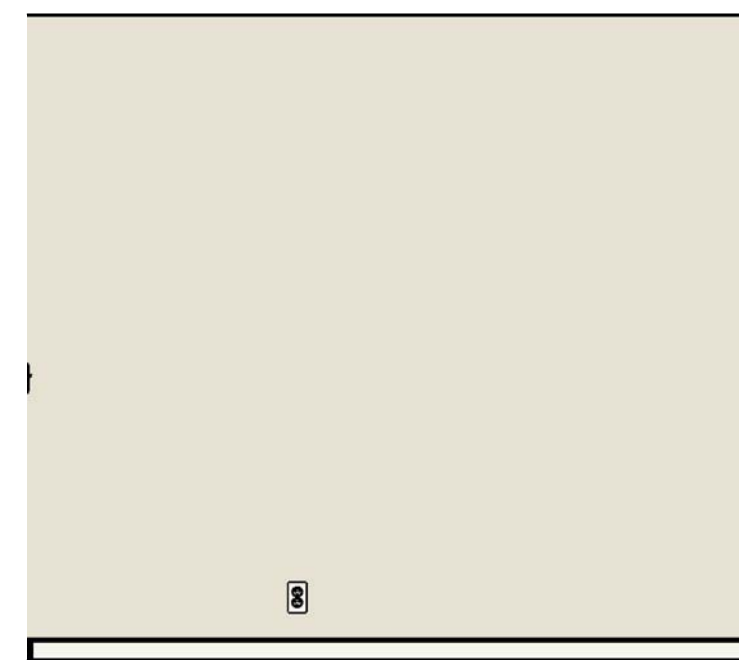
Elevation 36



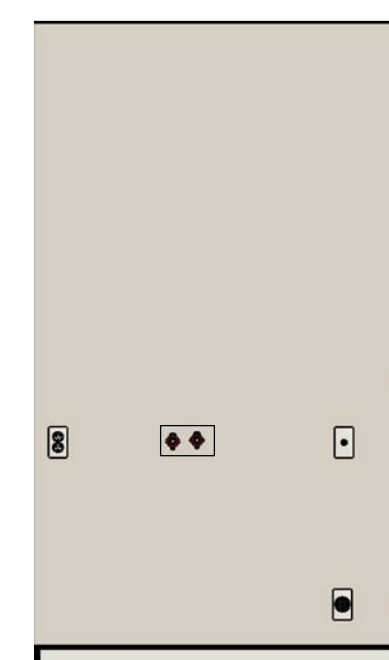
Elevation 38

Storage

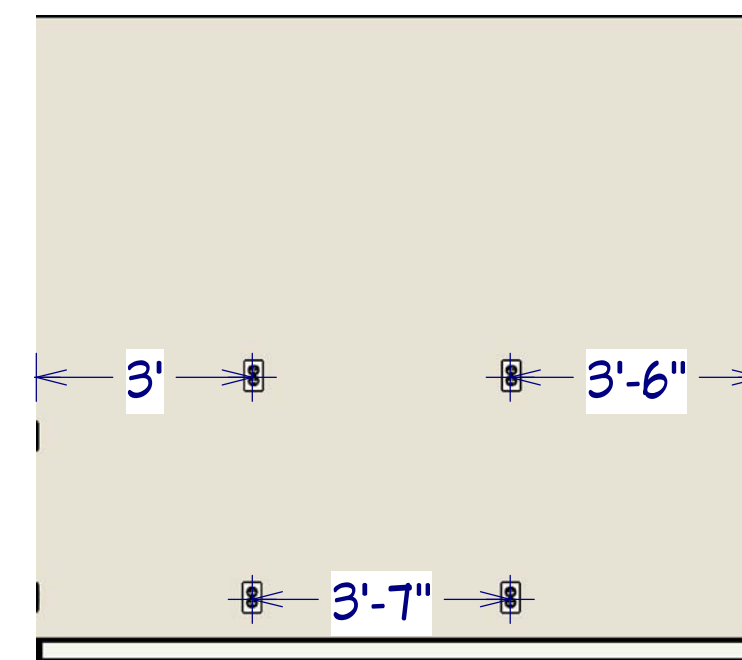
Scale 3/8" = 1'



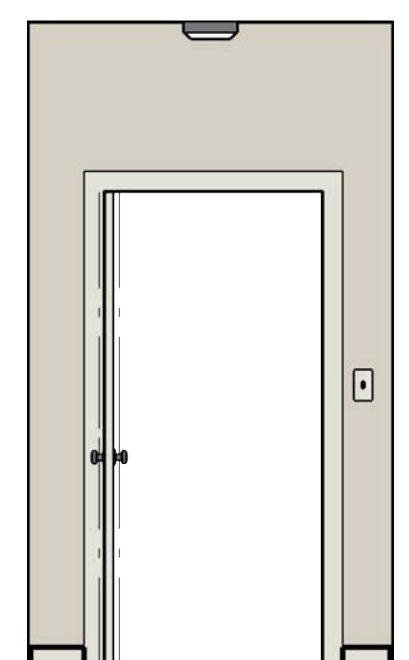
Elevation 42



Elevation 39



Elevation 41



Elevation 40

REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

ROOM ELEVATIONS

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

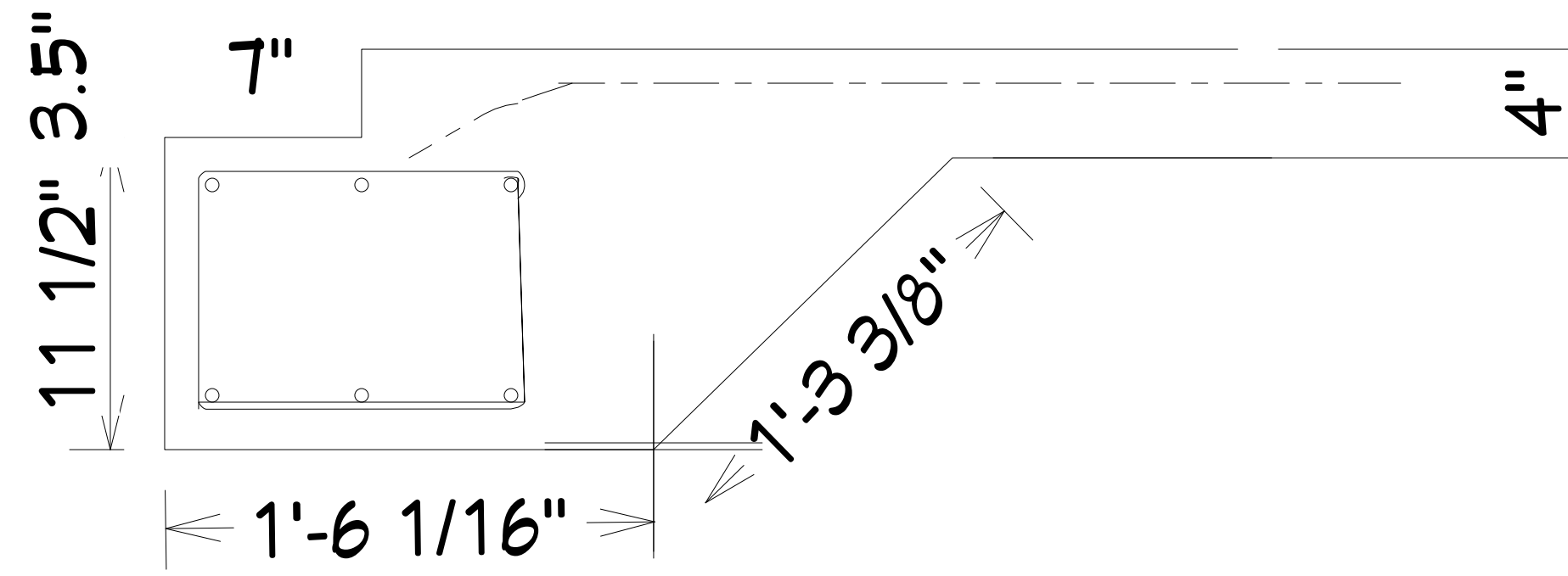
SCALE:

1/2" = 1'

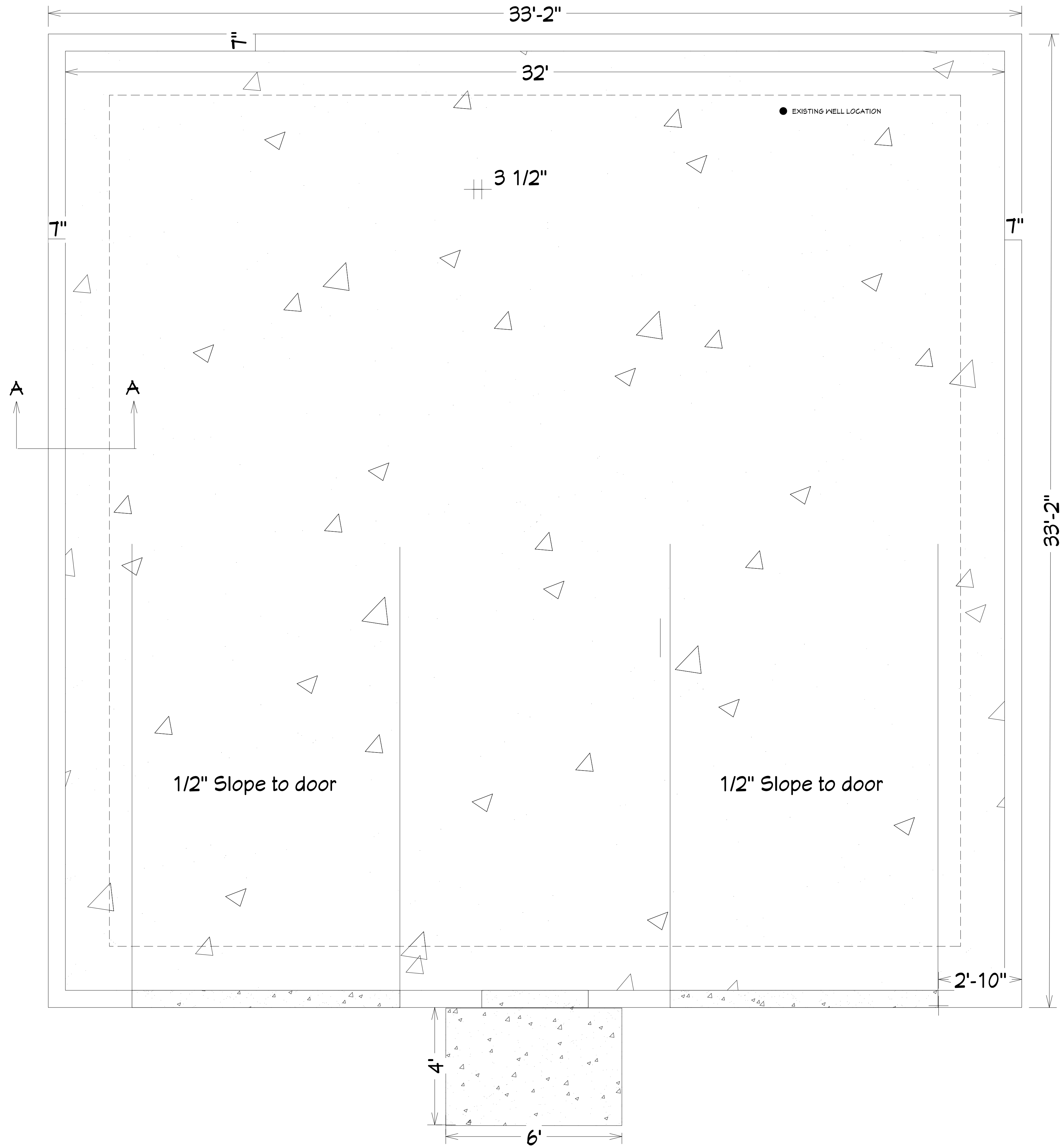
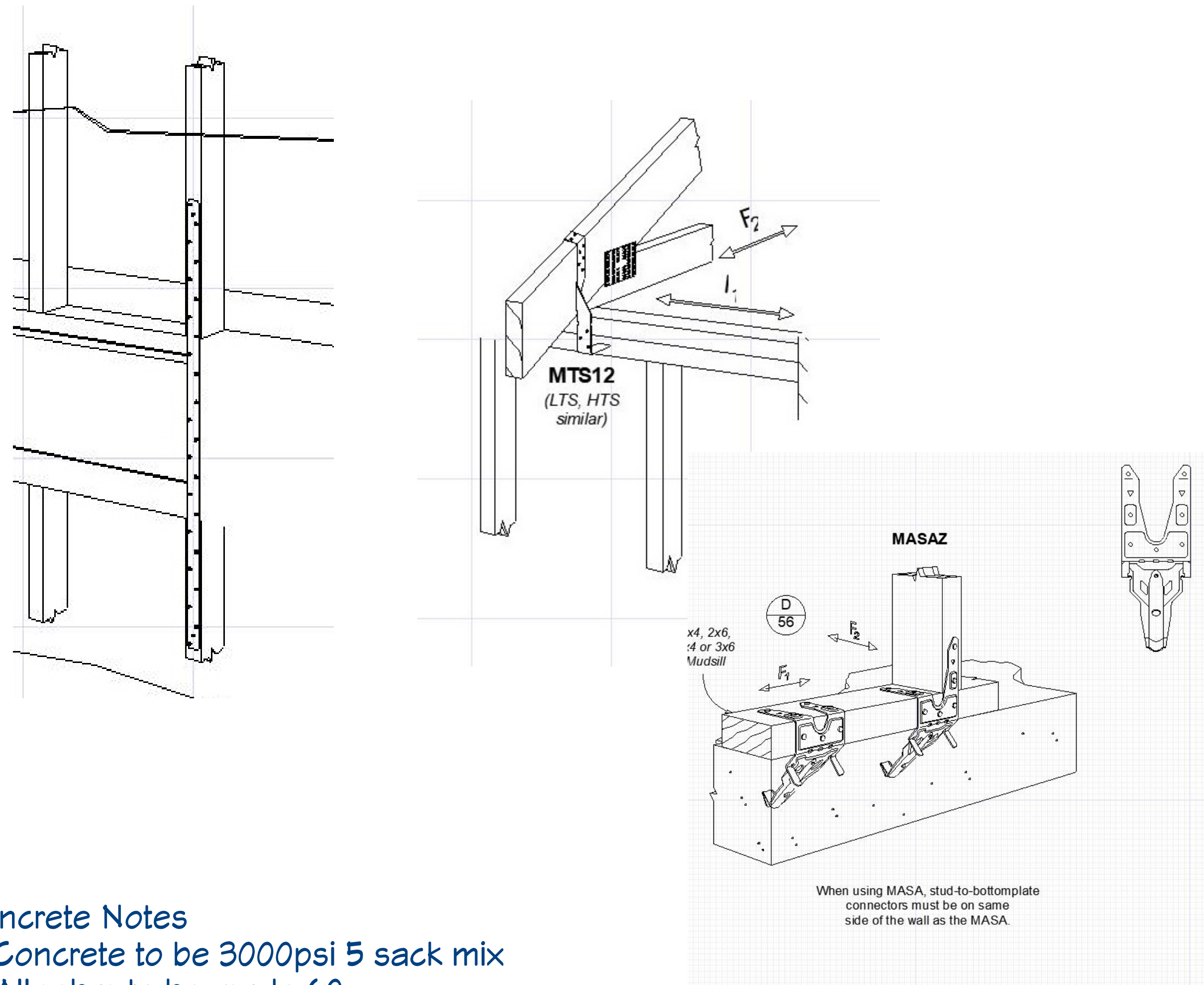
SHEET:

EL-5

6ea #5 Rebar Continuous with
#3 Bands @24" Perimeter, Slab
steel 6x6 - w2.9xw2.9 sheets



Section A-A



Concrete Notes

1. Concrete to be 3000psi 5 sack mix
2. All rebar to be grade 60.
3. Slab to have hard trowel finish.
4. Both Garage door entrances to have a 1/2" slope from 16' in back to the entrance.
5. Simpson Anchors MASA mudsill anchor shall be installed 2' oc on all sides. Based on Loading shear connection is over 520 plf.
6. MST 60 in. 10-Gauge Galvanized Medium Strap Tie every other stud between 1st and 2nd floor installed with 16ea 10d nails on each strap. Floor trusses glued and screwed to top and bottom plates. This configuration should allow for 150mph winds.
7. MTS12 Rafter/truss-to-Wood top plate connections installed with 14ea 10d nails in all holes.

REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Foundation Plan

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

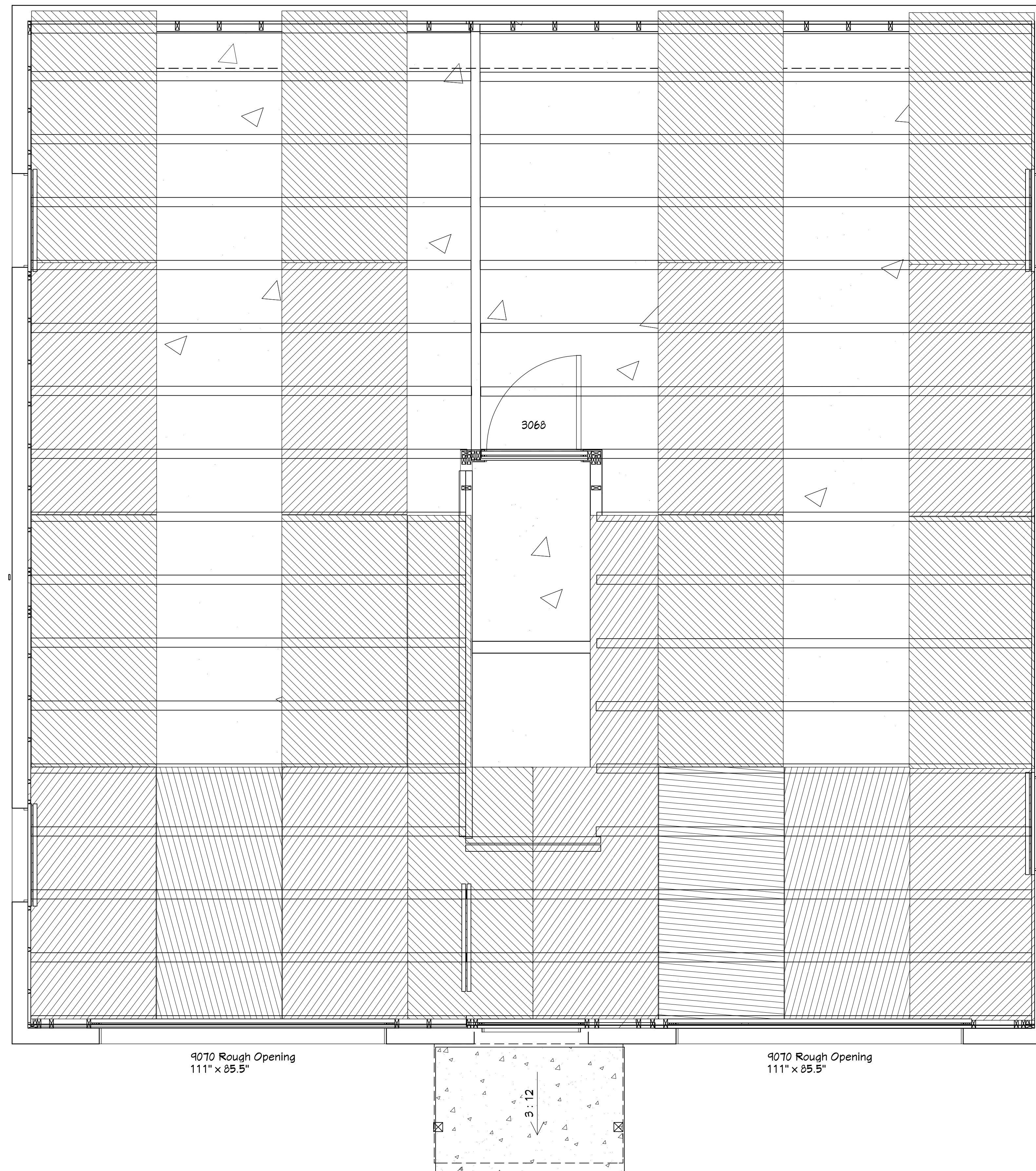
1/18/2021

SCALE:

1/2" = 1'

SHEET:

S-1



Plywood Decking to be cut Flush with wall and cut piece moved to other end and placed in gap. Glued and screwed in position.

1. Plywood Decking to be T&G Sheathing Plywood (Common: 1-1/8 in. x 4 ft. x 8 ft.; Actual: 1.069 in. x 48 in. X 96 in.).
2. Decking to be glued to floor trusses and screwed to trusses @ 8" OC with 2" screws sunk flush.
3. Decking to be perpendicular to floor trusses.
4. Decking to be cut out in stairwell area.

NUMBER	DATE	REVISION TABLE	REVISOR	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

2nd Floor Decking

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

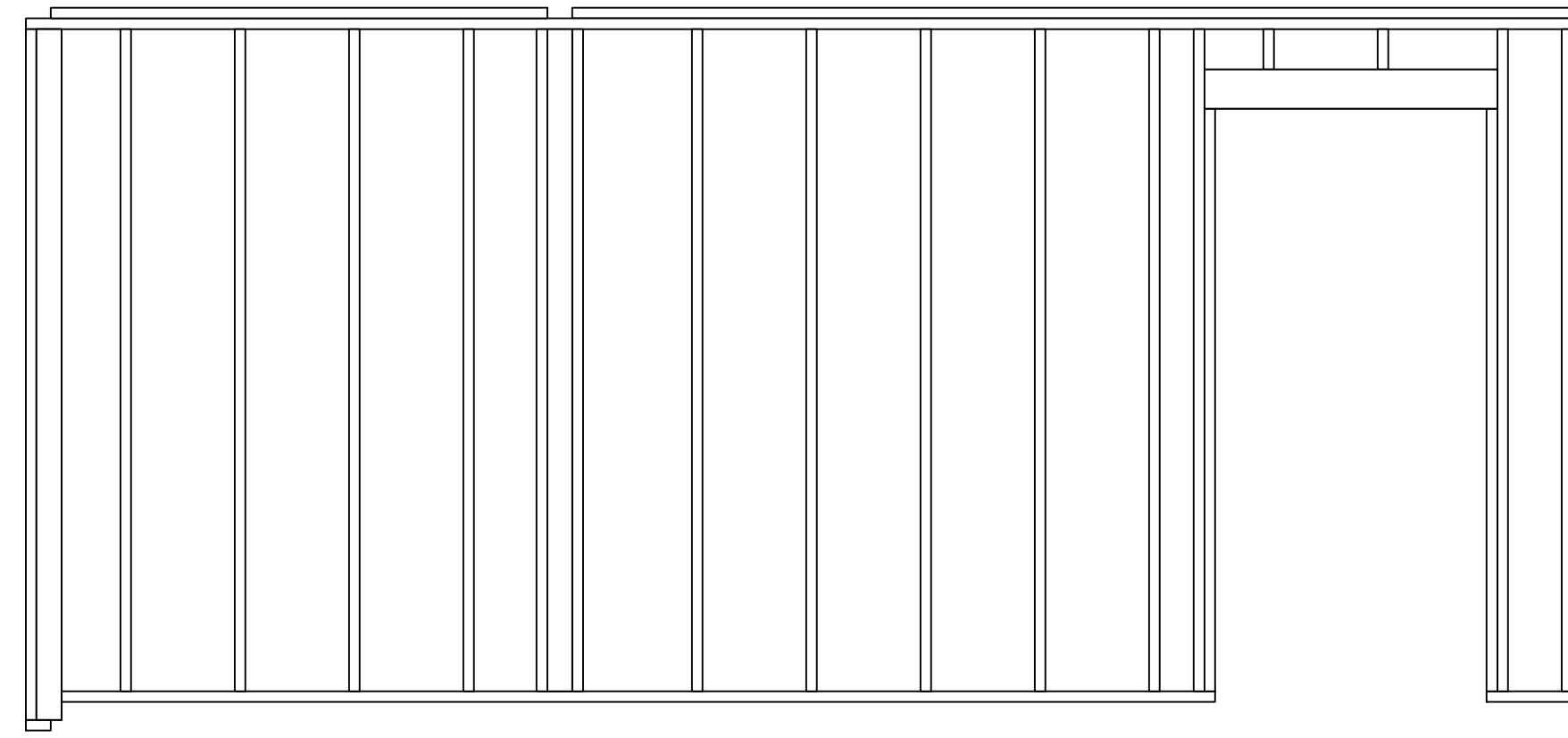
1/18/2021

SCALE:

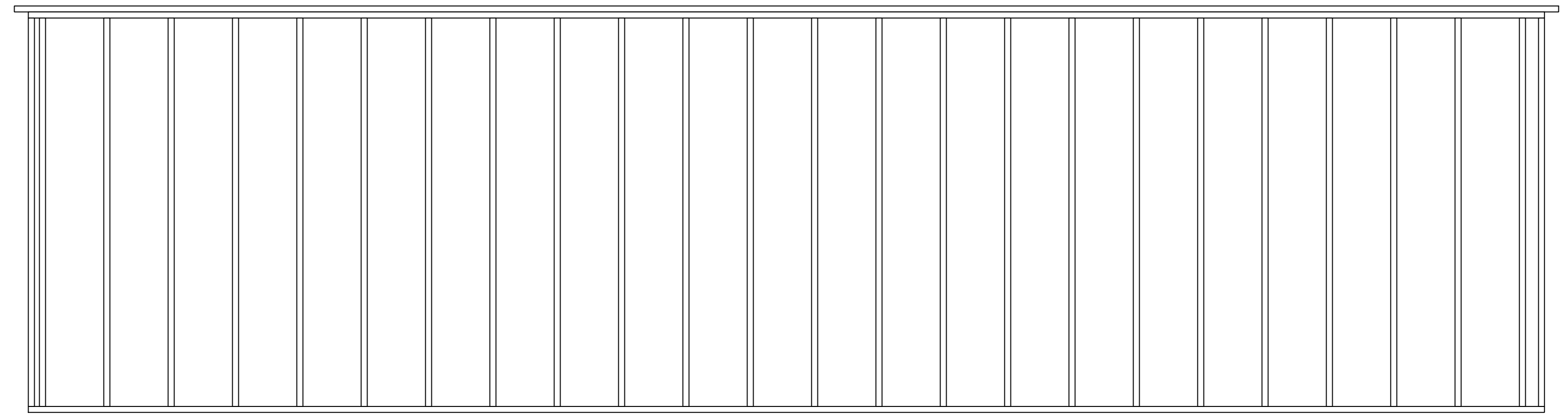
1/2" = 1'

SHEET:

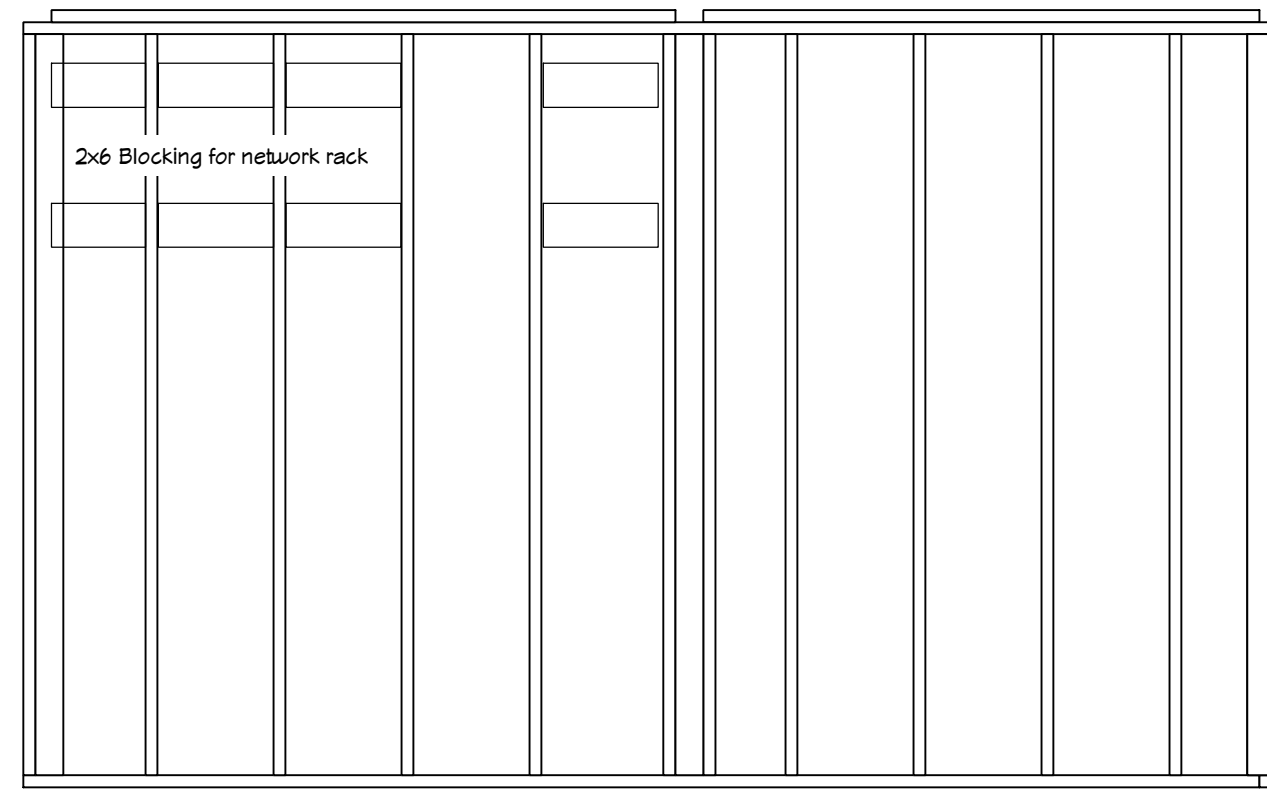
S-2



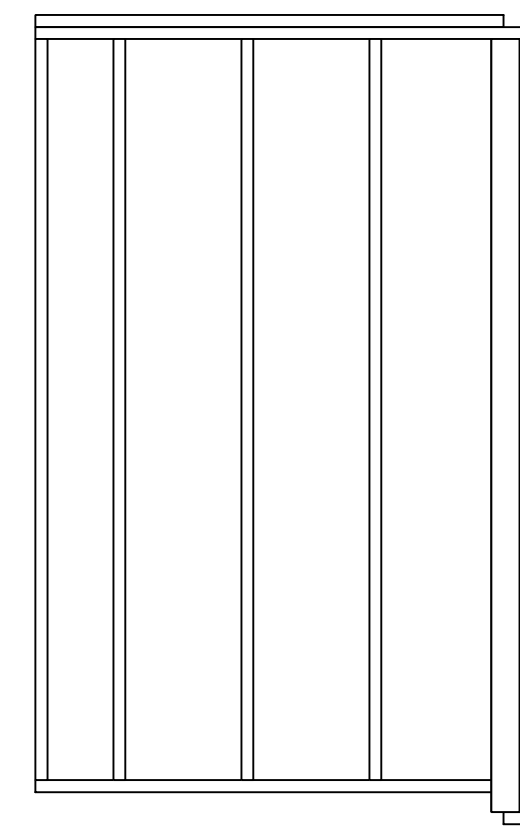
Wall Layer 2 - Viewed From Outside



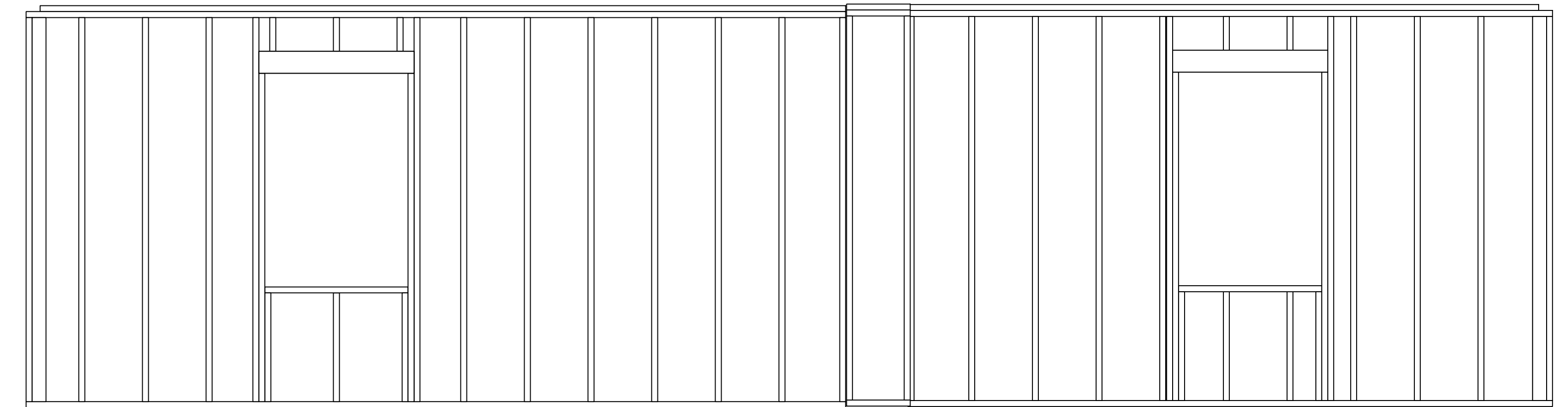
South Side - Viewed From Outside



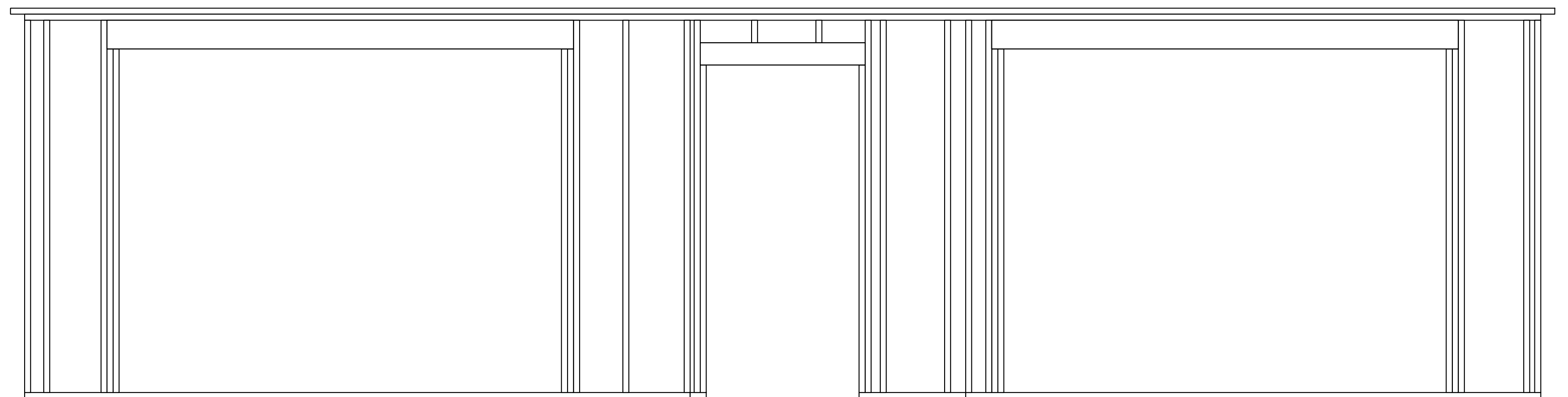
Wall Layer 2 - Viewed From Outside



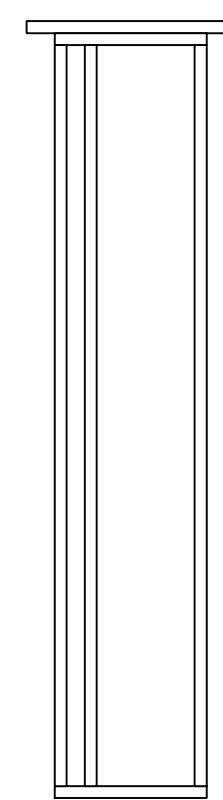
Wall Layer 2 - Viewed From Outside



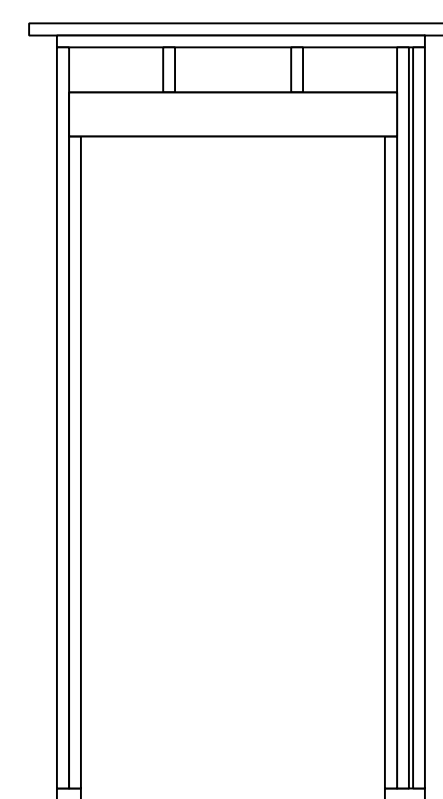
East Side - Viewed From Outside



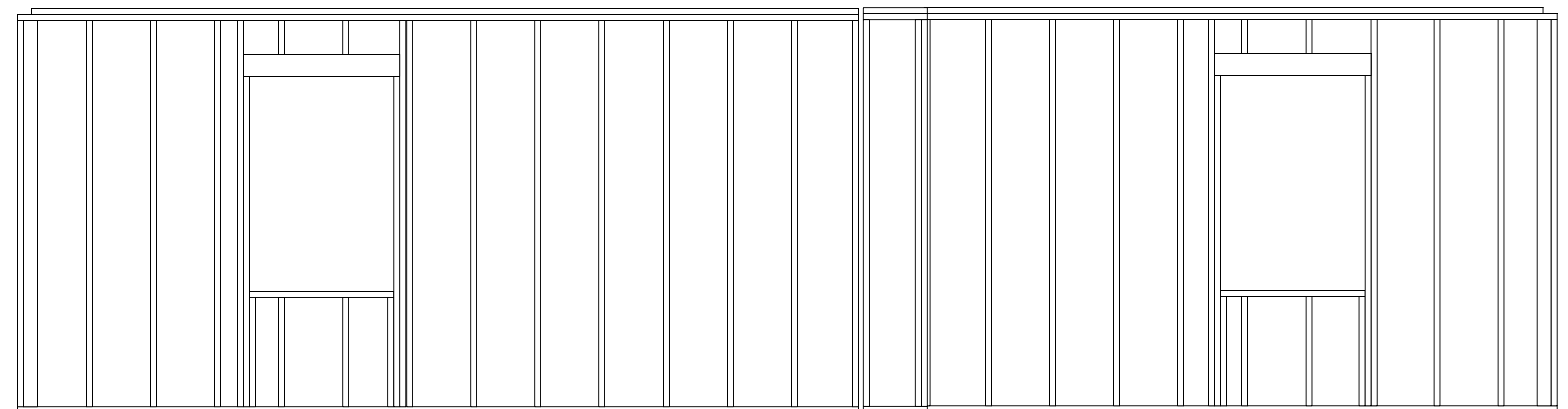
North Side - Viewed From Outside



Layer 2 - Viewed From Outside



Wall Layer 2 - Viewed From Outside



West Side - Viewed From Outside

REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Floor 1 Framing

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

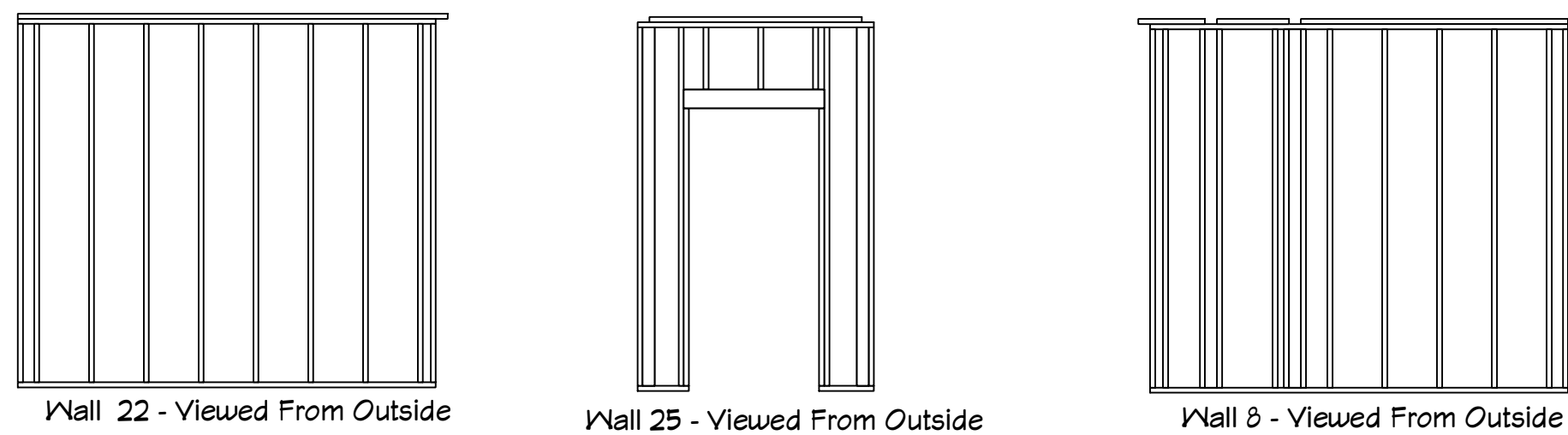
1/18/2021

SCALE:

1/2" = 1'

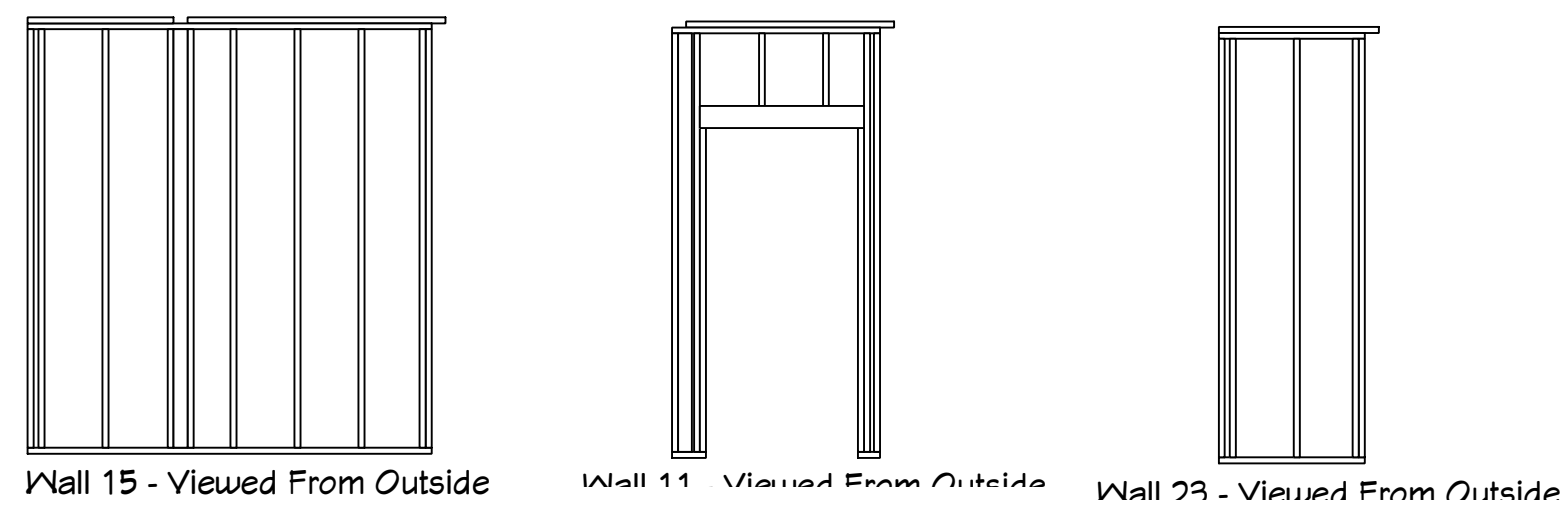
SHEET:

F-1



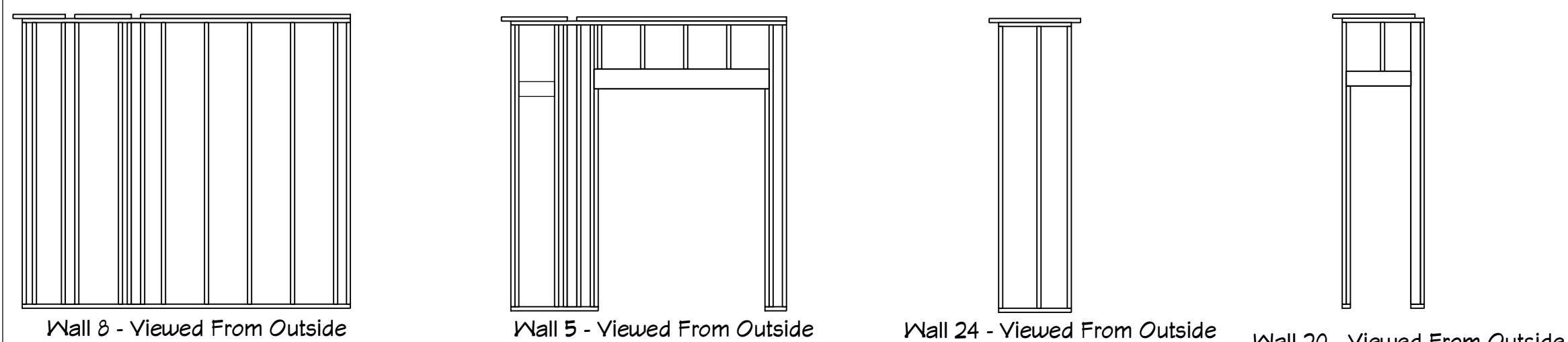
Wall 22 - Viewed From Outside Wall 25 - Viewed From Outside Wall 6 - Viewed From Outside

Storage Room



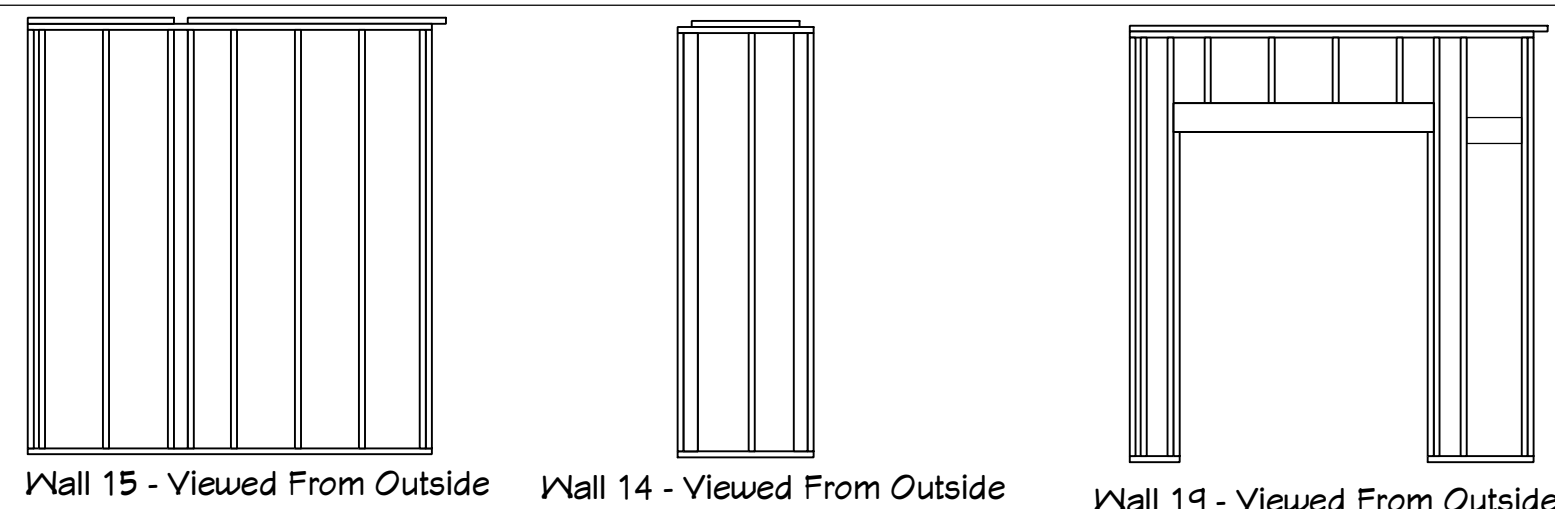
Wall 15 - Viewed From Outside Wall 11 - Viewed From Outside Wall 23 - Viewed From Outside

Conference Room Closet



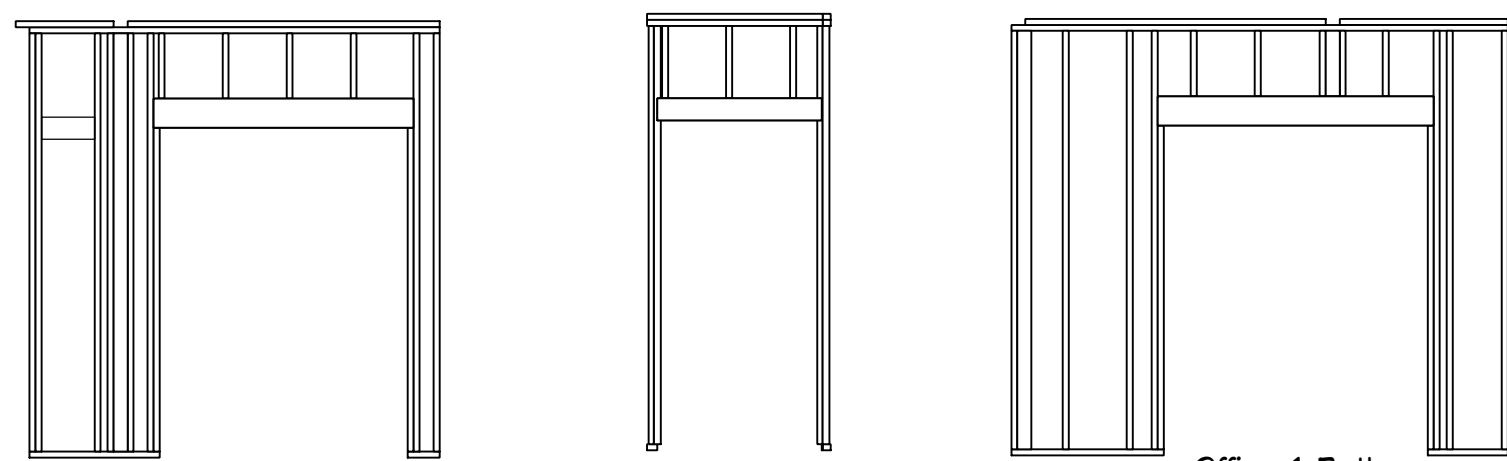
Wall 8 - Viewed From Outside Wall 5 - Viewed From Outside Wall 24 - Viewed From Outside Wall 20 - Viewed From Outside

Office 1 Closet walls



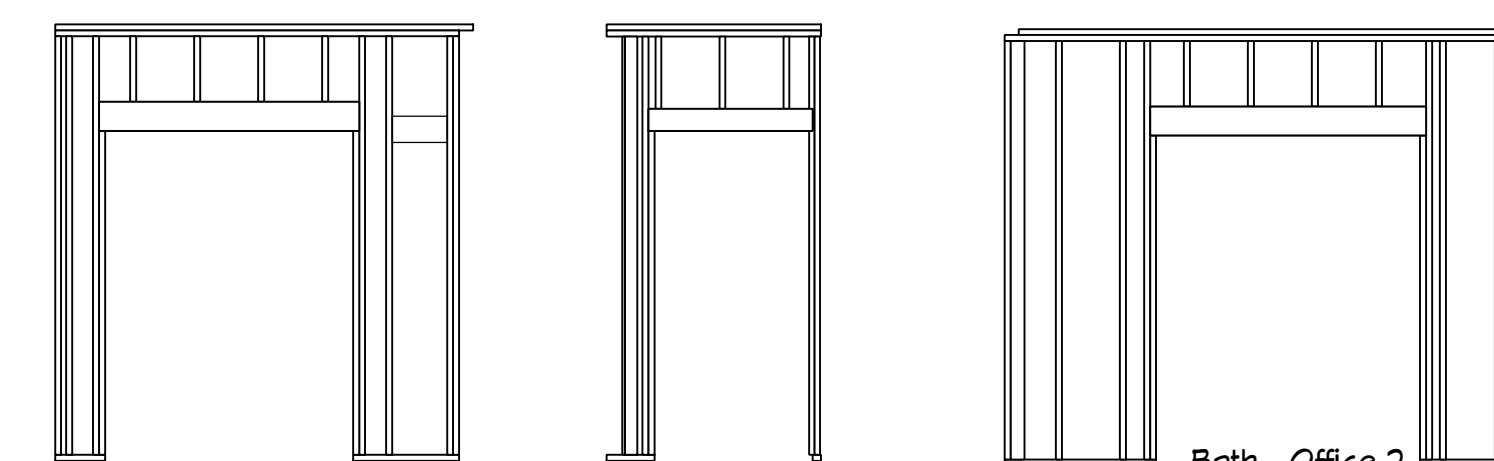
Wall 15 - Viewed From Outside Wall 14 - Viewed From Outside Wall 19 - Viewed From Outside

Office 2 Closet walls



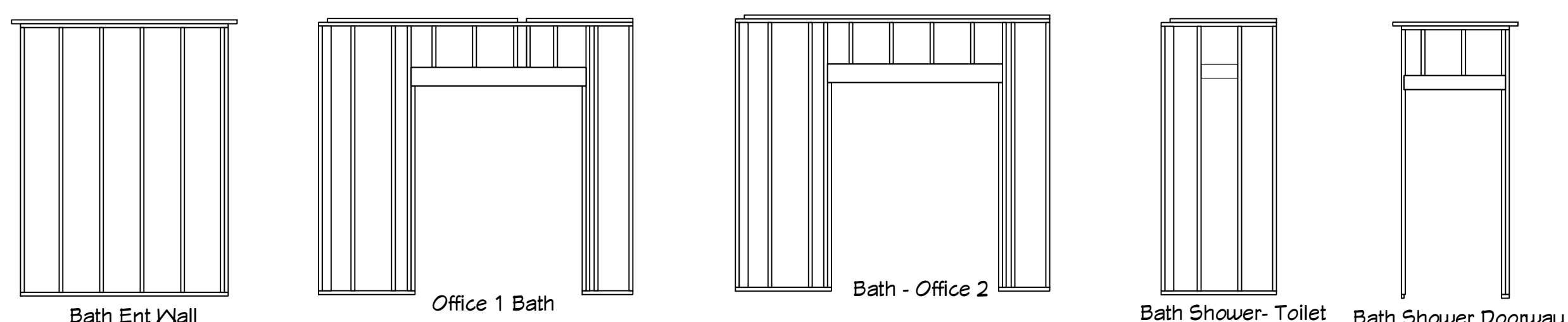
Wall 5 - Viewed From Outside Office 1 Entrance Office 1 Bath

Office 1



Wall 19 - Viewed From Outside Office 2 - Entrance Bath - Office 2

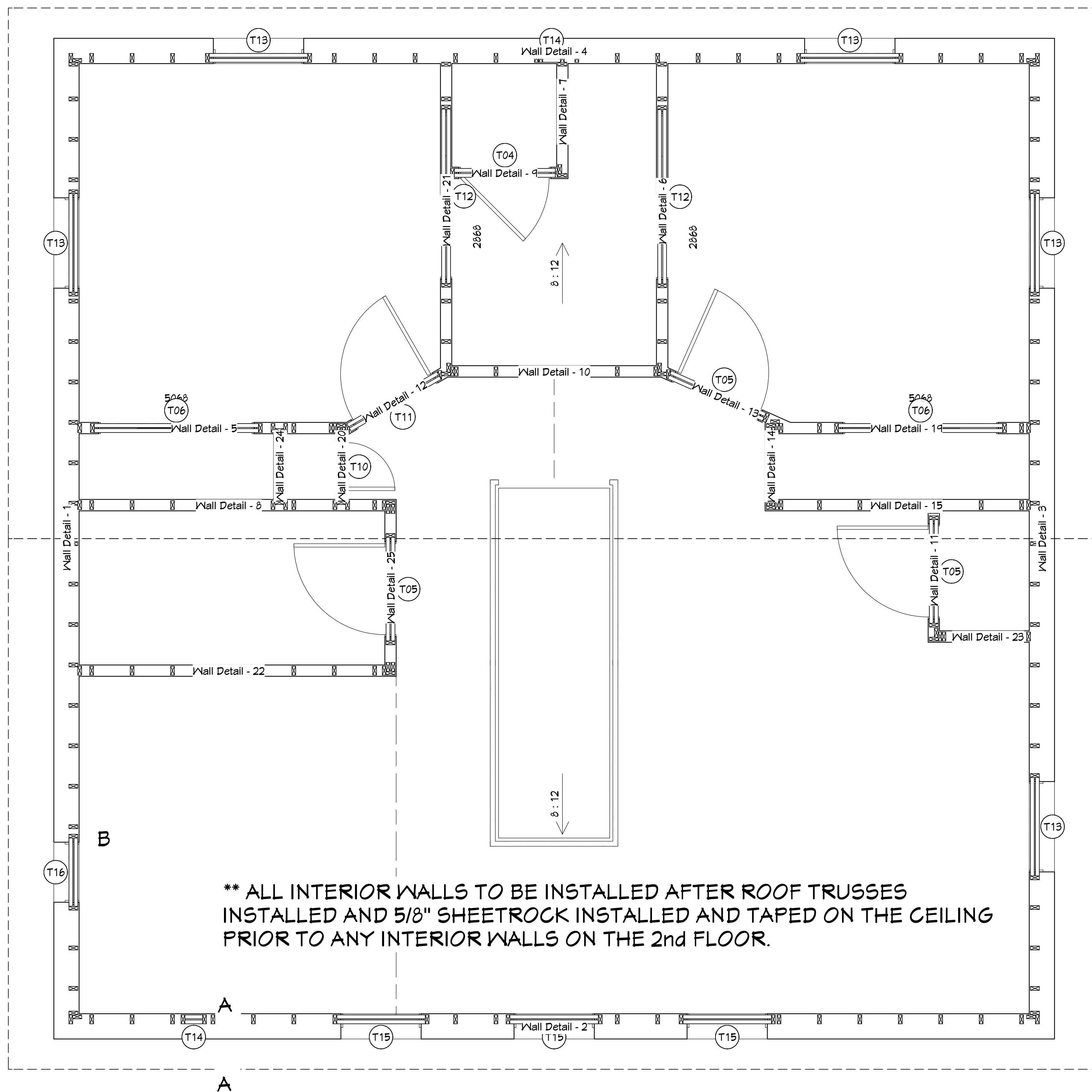
Office 2



Bath Ent Wall Office 1 Bath Bath - Office 2 Bath Shower- Toilet Bath Shower Doorway

Bathroom

Wall sections are all Scaled 1" = 1/4"



FRAMING SCHEDULE						
NUMBER	NAME	QTY	NOMINAL	LENGTH	MATERIAL	TYPE
T01	FLOOR TRUSS	34	14"		FIR FRAMING	LUMBER
T02	HEADER	4	2 X T 1/8	116"	FIR STUD 16" OC	LUMBER
T04	HEADER	2	2X6	40"	FIR STUD 16" OC	LUMBER
T05	HEADER	12	2X6	41"	FIR STUD 16" OC	LUMBER
T06	HEADER	4	2X6	65"	FIR STUD 16" OC	LUMBER
T07	POST	1	4X4	93 5/8"	FIR FRAMING	LUMBER
T08	POST	1	4X4	94 3/16"	FIR FRAMING	LUMBER
T10	HEADER	2	2X6	24"	FIR STUD 16" OC	LUMBER
T11	HEADER	2	2X6	41 1/8"	FIR STUD 16" OC	LUMBER
T12	HEADER	4	2X6	69"	FIR STUD 16" OC	LUMBER
T13	HEADER	18	2X6	39"	FIR STUD 16" OC	LUMBER
T14	HEADER	4	2X6	7"	FIR STUD 16" OC	LUMBER
T15	HEADER	6	2X6	35"	FIR STUD 16" OC	LUMBER
T16	HEADER	2	2X6	27"	FIR STUD 16" OC	LUMBER

REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Framing Wall Schedule

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

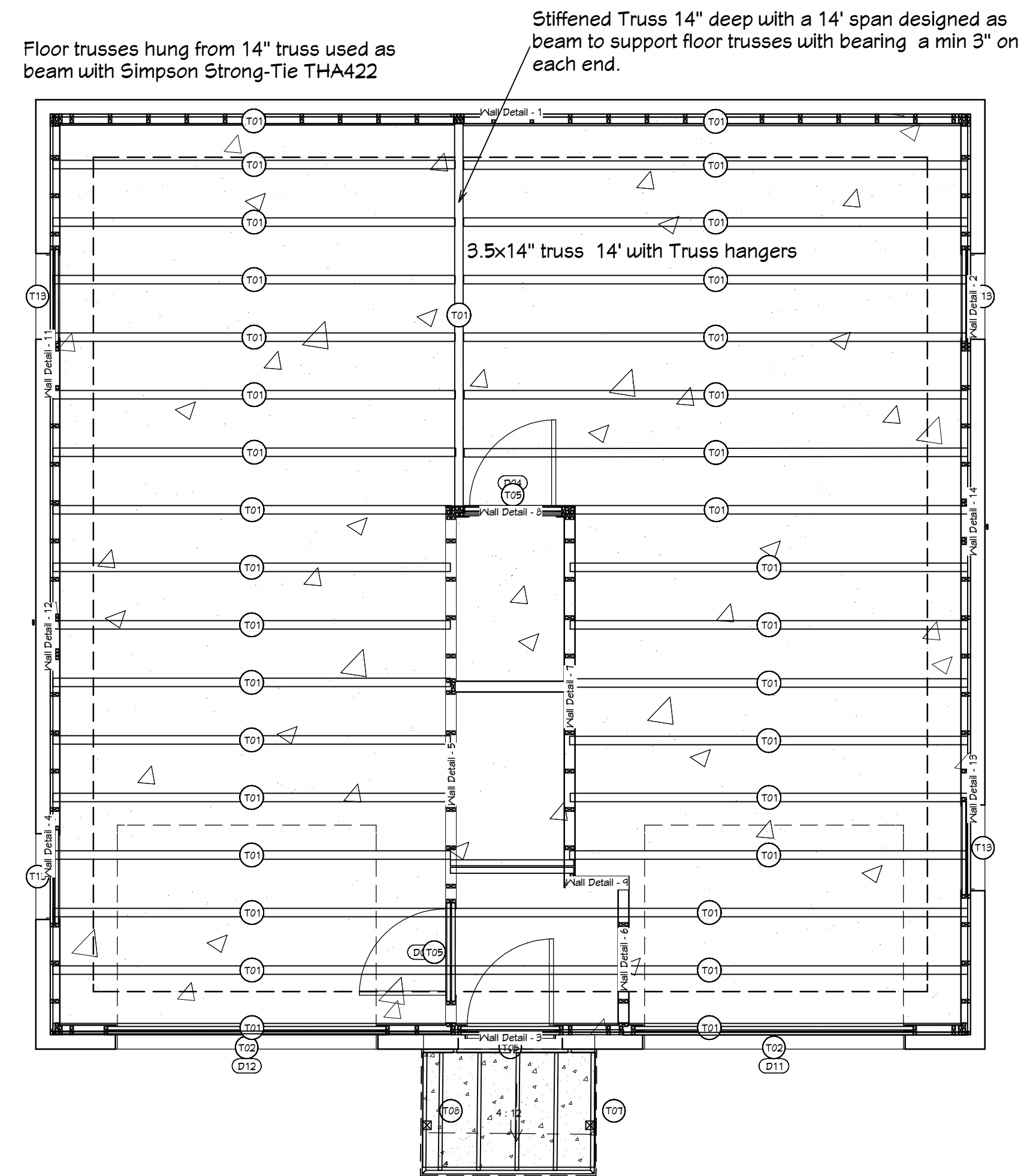
1/18/2021

SCALE:

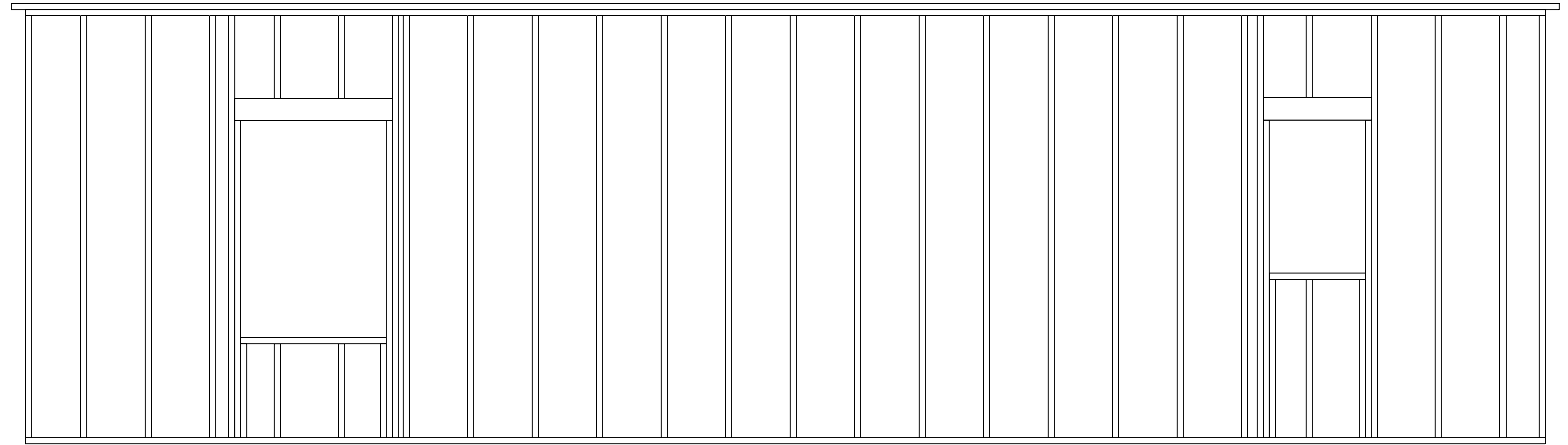
1/2" = 1'

SHEET:

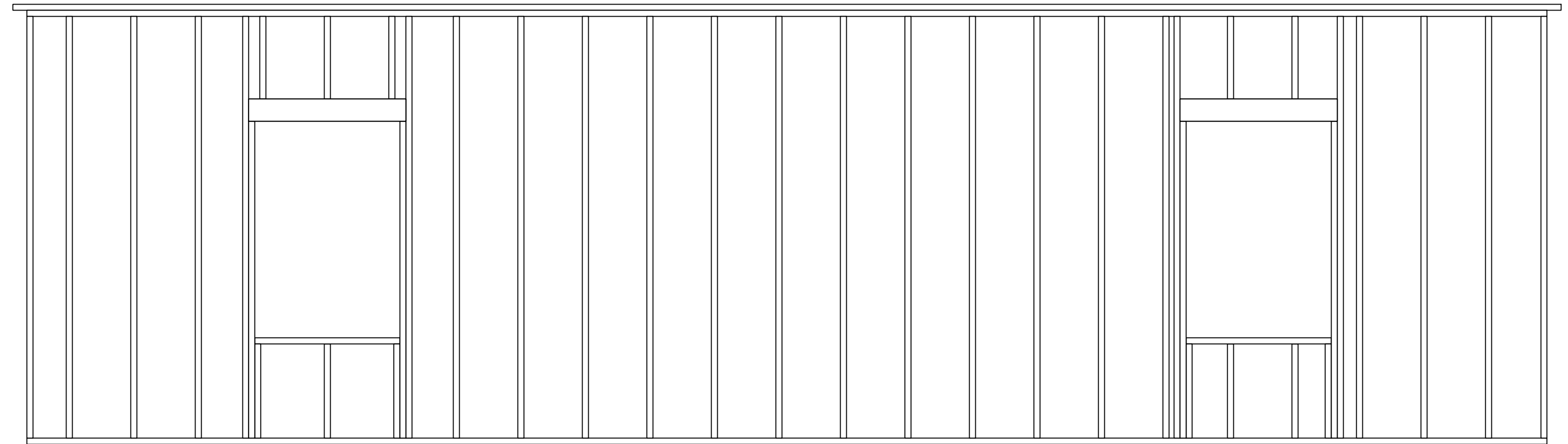
F-2



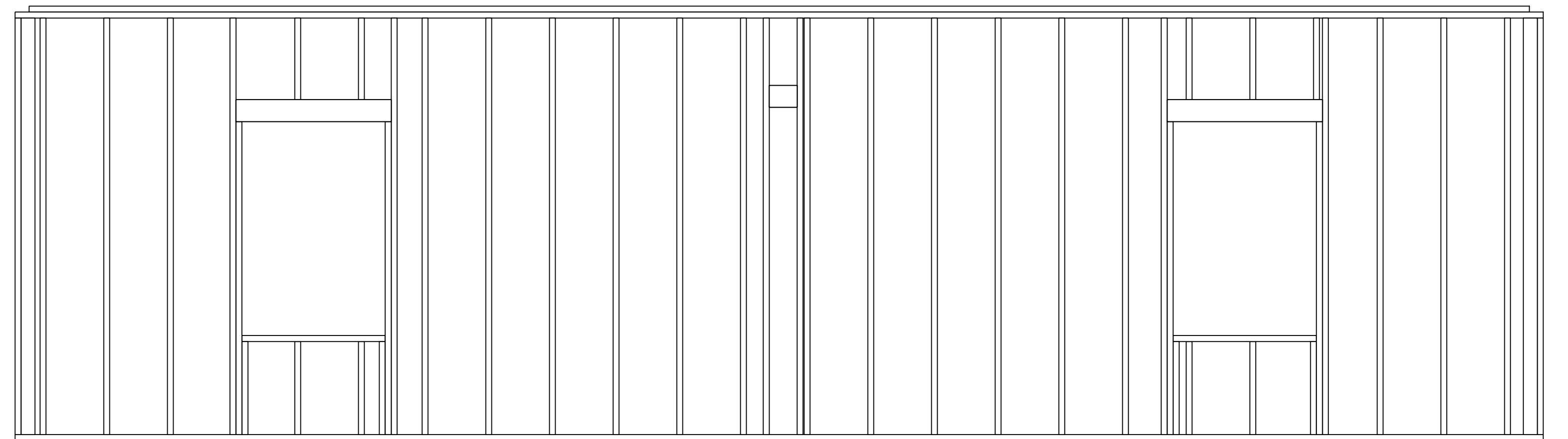
Floor Truss Layout



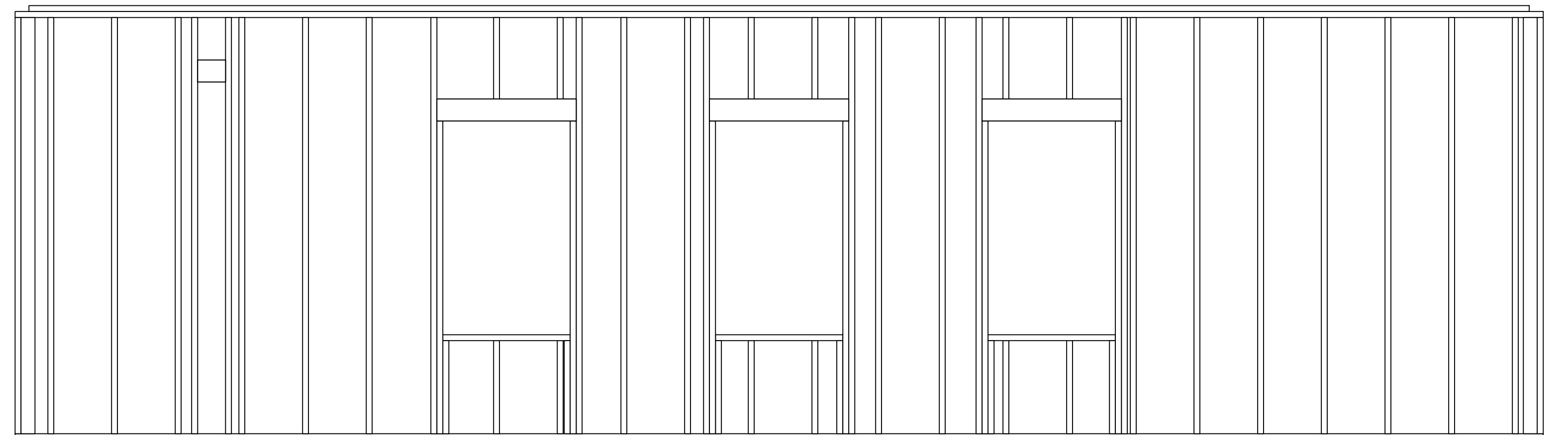
East Side - Viewed From Outside



West Side - Viewed From Outside



South Side - Viewed From Outside

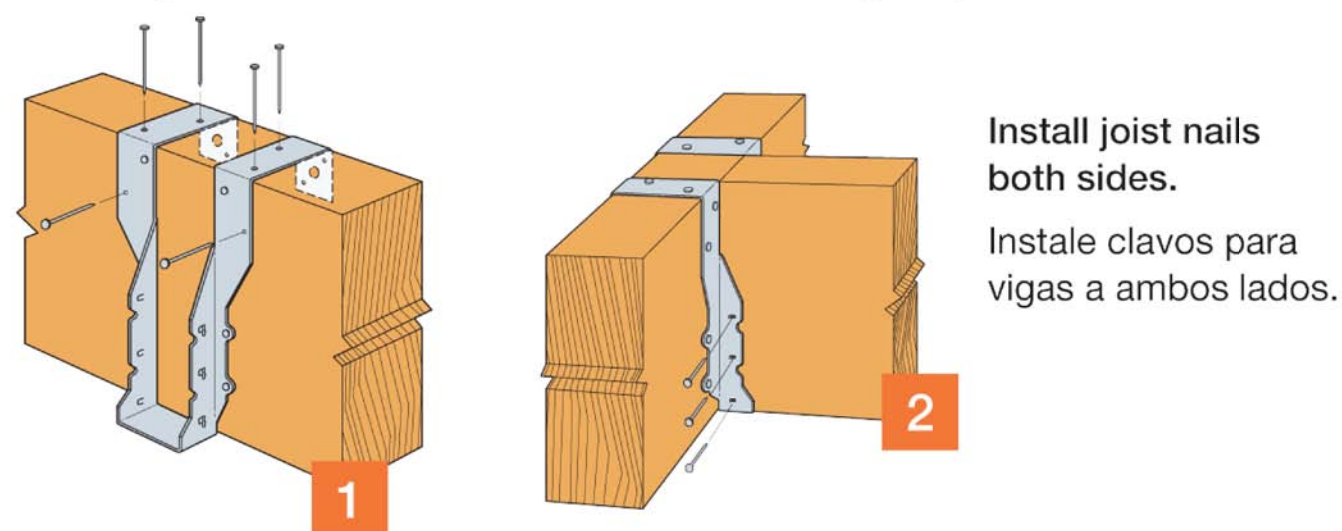


North Side - Viewed From Outside

THA - Installation on Solid Header / Instalación Sobre Viga Cabezal Sólida

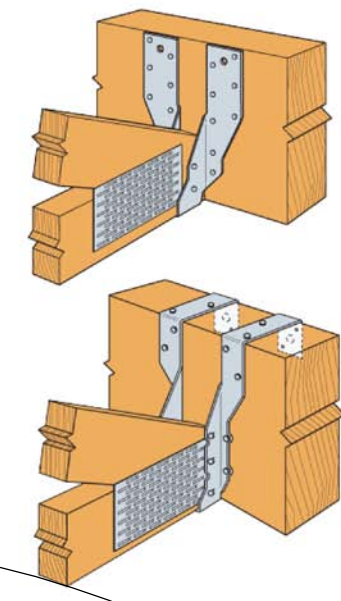


Top-Mount Condition / Condición de Montaje Superior

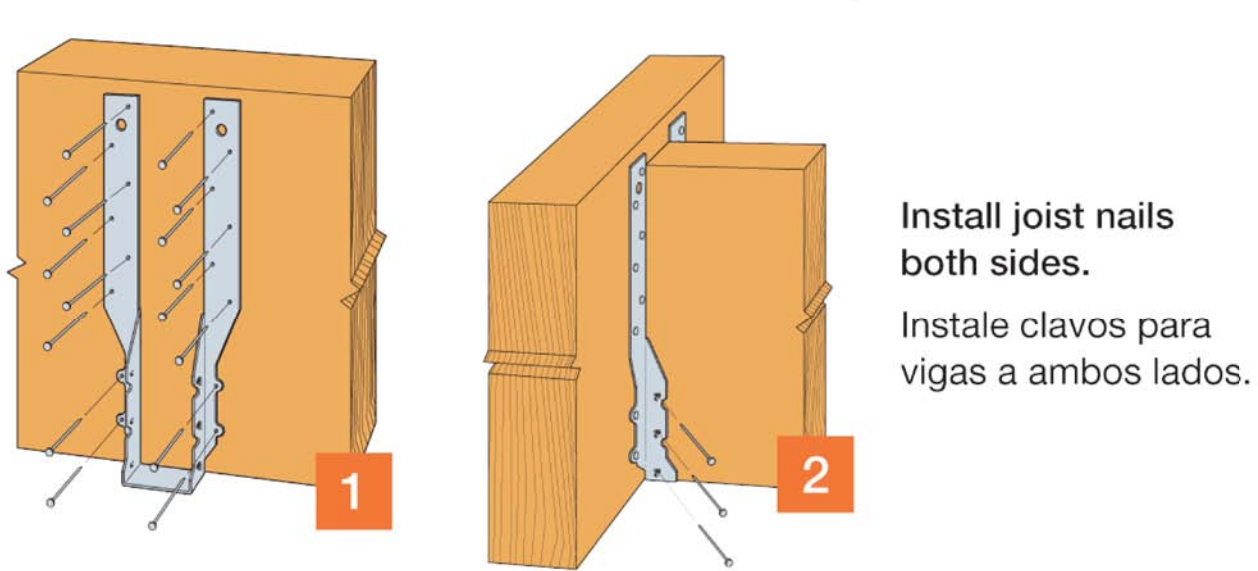


Installation on Solid Header / Instalación Sobre Viga Cabezal Sólida

Modelo	Top and Face Encima y Cara	Carried Member Miembro Soportado
THA29	(16) 10d	(4) 10d
THA213	(14) 10d	(4) 10d
THA413	(14) 10d	(4) 10d
THA218	(18) 10d	(4) 10d
THA218-2	(18) 10d	(4) 10d
THA418	(22) 16d	(6) 16d
THA422	(22) 16d	(6) 16d
THA222-2	(22) 16d	(6) 16d
THA422-2	(30) 16d	(6) 16d
THA426	(30) 16d	(6) 16d

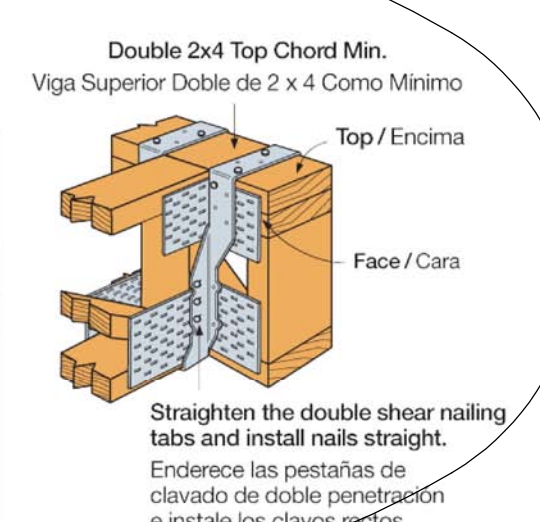


Face-Mount Condition / Condición de Montaje Sobre Cara



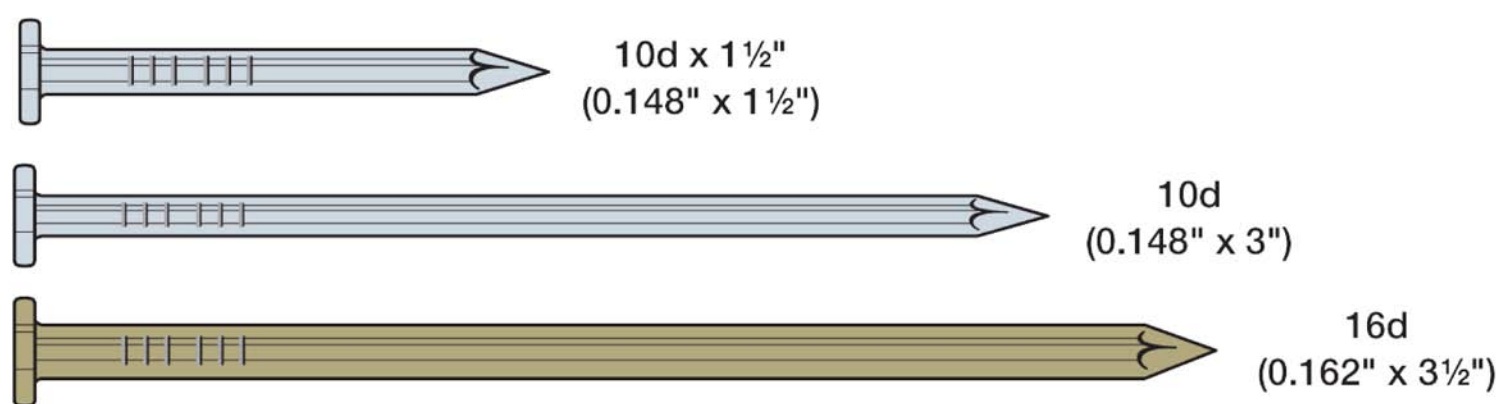
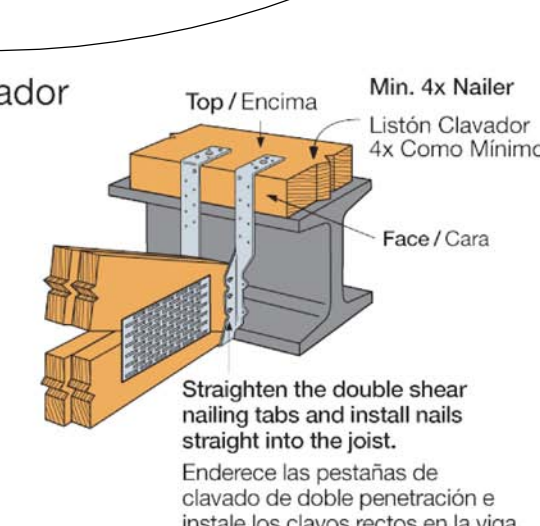
Installation on Truss / Instalación Sobre Cercha

Nail Location Ubicación de Los Clavos	Qty / Nail Cant./Clavo
Top / Encima	(4) 16d
Face / Cara	(4) 16d
Carried Member Miembro soportado	Fill all holes with 16d Llene todos los orificios con clavos 16d



Installation on Nailers / Instalación en Listón Clavador

Nail Location Ubicación de Los Clavos	4x Nailers / Listón Clavador 4x
Top / Encima	(4) 16d
Face / Cara	(4) 16d
Carried Member Miembro soportado	Fill all holes with 16d Llene todos los orificios con clavos 16d



REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Floor 2 Framing

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

1/2" = 1'

SHEET:

F-3

THA/THAC

Adjustable Truss Hangers



This product is preferable to similar connectors because of easier installation, higher loads, lower installed cost, or a combination of these features.

The THA series have extra long straps that can be field-formed to give high adjustability and top flange hanger convenience. THA hangers can be installed as top flange or face-mount hangers.

THA4x and THA2x-2 models feature a dense nail pattern in the straps, which provides more installation options and allows for easy top flange installation.

Material: See table
Finish: Galvanized. Some products available in ZMAX® coating; see Corrosion Information, pp. 13-18.

Installation:
• Use all specified fasteners; see General Notes.

The following installation methods may be used:

Top Flange Installation - The straps must be field formed over the header - see table for minimum top flange requirements. Install top and face nails according to the table. Top nails shall not be within 1/2" from the edge of the top flange members.

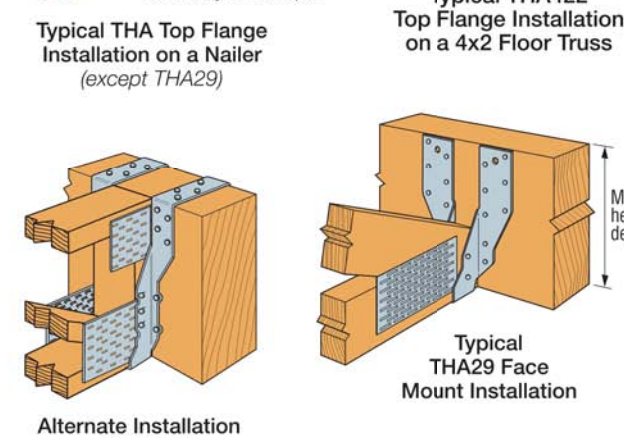
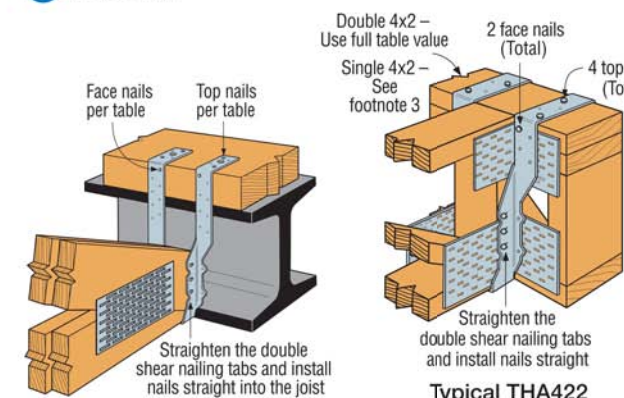
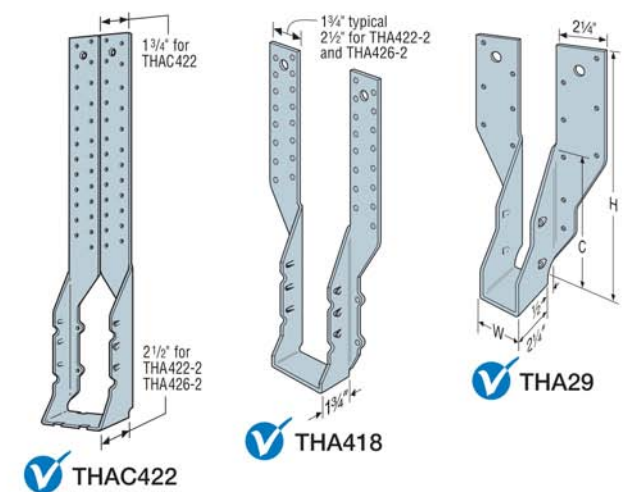
Face Mount Installation - Install all face nails according to the table. Not all nail holes will be filled on all models. On models where there are more nail holes than required, the lowest four face holes must be filled. Nails used for the joint attachment must be driven at an angle so that they penetrate through the corner of the joint into the header.

Alternate Installation - The THA 4x hangers may be installed in a top flange configuration using the tabulated fasteners for face-mount installation and achieve the face-mount installation loads. Install the tabulated face nails into the face and into the carrying member.

Uplift - Lowest face nails must be filled to achieve uplift loads.

Options:
• THA hangers available with the header flanges turned in for 3/8" (except THA413) and larger, with no load reduction - order THAC hanger.

Codes: See p. 14 for Code Reference Key Chart



Plated Truss Connectors

MASA/MASAP

Mud sill Anchors



This product is preferable to similar connectors because of easier installation, higher loads, lower installed cost, or a combination of these features.

Mud sill anchors have always been a time-saving alternative to anchor bolts, and the MASA and MASAP anchors provide a great alternative for 1/2" and 3/4" mud sill anchors on 2x, double-2x and 3x mud sills. It also eliminates the need for 3" square plate washers for seismic design and, in some cases, has allowable loads that meet or exceed the parallel- and perpendicular-to-plate shear loads of other cast-in-place anchors. Two versions of the MASA are available - the standard MASA for installation on standard forms and the MASAP for paneled forms.

The MASA and MASAP are code listed by ICC-ES under the 2012, 2015 and 2018 IBC® and IRC®.

Material: 16 gauge
Finish: Galvanized. All available in ZMAX® coating. See Corrosion Information, pp. 13-15.

Installation:
• Use all specified fasteners; see General Notes.

MASA/MASAP
- Concrete shall have a minimum f'c = 2,500 psi.

- Spalling - Full loads apply for spalls up to a maximum height of 1 1/2" and a maximum depth of 1/4". Any exposed portion of the mud sill anchor must be protected against possible corrosion.

- For prescriptive anchor spacing refer to table below.

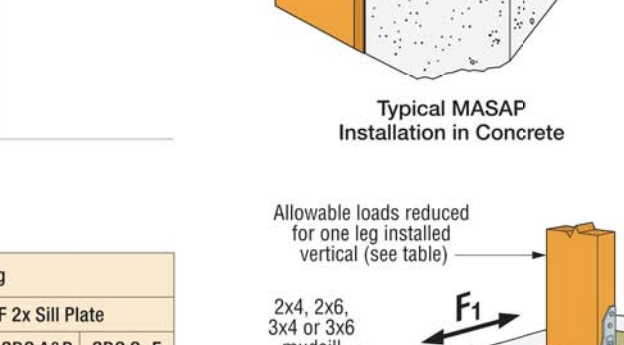
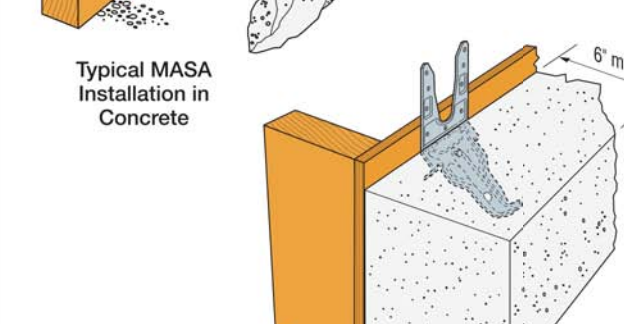
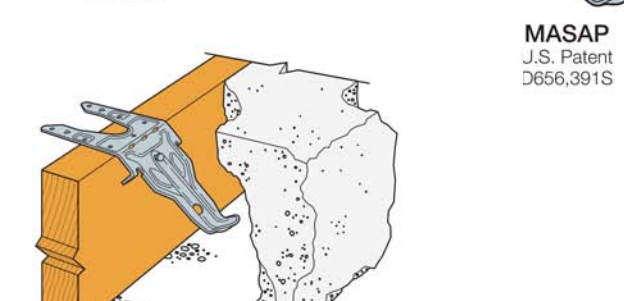
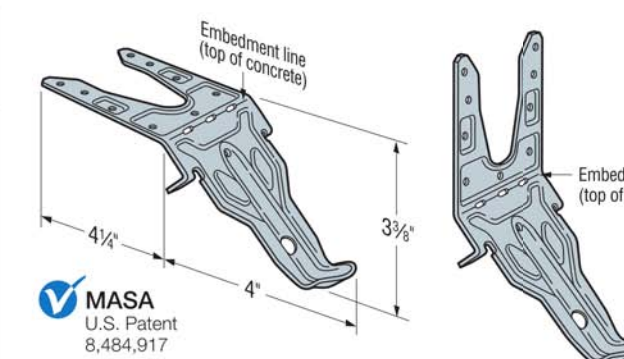
- Testing shows that these mud sill anchors can be used in lieu of code-required anchor bolts and square washer in high seismic zones.

- Minimum MASA end distance is 4" and minimum center-to-center spacing is 8" for full load.

- For continuous load path, MASA should be installed on the same side of wall as uplift connectors.

- For installation in severe corrosion environments, refer to strongtie.com/corrosion for additional considerations.

Codes: See p. 12 for Code Reference Key Chart



Prescriptive Spacing for MASA/MASAP to Replace Sill Anchor Bolts

Table with columns for Model No., Anchor Bolt Size to Replace, Anchor Bolt Spacing to Replace, and MASA/MASAP Spacing (Wind and SDC A&B, SDC C-E, HF 2x Sill Plate).

1. Detached one- and two-family dwellings in SDC C may use the "Wind and SDC A&B" spacing.
2. Spacing is based on the parallel-to-plate load direction for MASA standard installation only.
3. 3/4" anchor bolt required for Seismic Design Category E.

THA/THAC

Adjustable Truss Hangers (cont.)

These products are available with additional corrosion protection. For more information, see p. 18.

Large table with columns for Model No., Ga., Dimensions (in.), Min. Header Flange Depth, Fasteners (Carried Member, Uplift, Straight, Slant), DF/SP Allowable Loads (Uplift, Snow, Roof, Wind), and SP/HF Allowable Loads (Uplift, Snow, Roof, Wind).

1. Uplift has been increased 60% for wind or earthquake loading with no further increase allowed; reduce where other loads govern.
2. Wind (W10) is a downward rating.
3. For single 4x2 top chord carrying members or single 2x nailers, the following THA hangers can be installed using 10d x 1 1/2" top nails and 2" 16d face nails with reduced allowable loads as noted.

Plated Truss Connectors

MASA/MASAP

Mud sill Anchors (cont.)

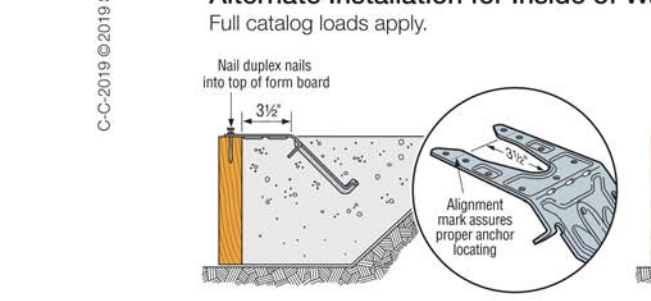
These products are available with additional corrosion protection. For more information, see p. 15.

Table with columns for Model No., Sill Size, Fasteners (in.), Allowable Loads (Standard, One-Leg, Two-Legs), and Code Ref.

1. Loads have been increased for wind or earthquake loading, with no further increase allowed. Reduce where other loads govern.
2. Concrete shall have a minimum compressive strength of f'c = 2,500 psi.
3. Allowable loads are based on a minimum seal width of 6".

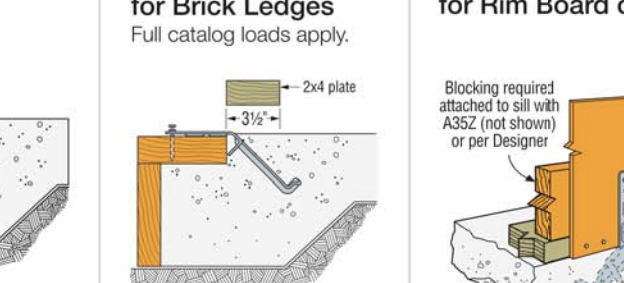
Alternate Mud sill Anchor Installations

Alternate Installation for Inside of Wall Continuity
Full catalog loads apply.



Step 1: Attach MASA 3/2" from inside of form. After concrete cures, remove nails and bend straps up 90°.
Step 2: Place mud sill on concrete and nail MASA over mud sill. Not applicable to 2x6 and wider sill plates in SDC D-F.

Alternate Installation for Brick Ledges
Full catalog loads apply.



Alternate Installation for Rim Board or Blocking
Blocking required attached to sill with ASD, not shown or per drawing.
Maximum 1/2" Sheathing

LTS/MTS/HTS

Twist Straps

Twist straps provide a tension connection between two wood members. They resist uplift at the heel of a truss economically. LTS/MTS have a 2"-bond section and HTS has a 3W-bond section that eliminates interference at the transition points between the two members.

Material: LTS - 18 gauge; MTS - 16 gauge; HTS - 14 gauge

Finish: Galvanized. Some products available in stainless steel and ZMAX® coating. See Corrosion Information, pp. 13-15.

Installation:
• Use all specified fasteners; see General Notes.

• LTS, MTS and HTS are available with the bond reversed. Specify "REV" after the model number, such as MTS16-REV.

• Many of these products are approved for installation with Strong-Tie® SD Connectors screws. See pp. 335-337 for more information.

Codes: See p. 12 for Code Reference Key Chart

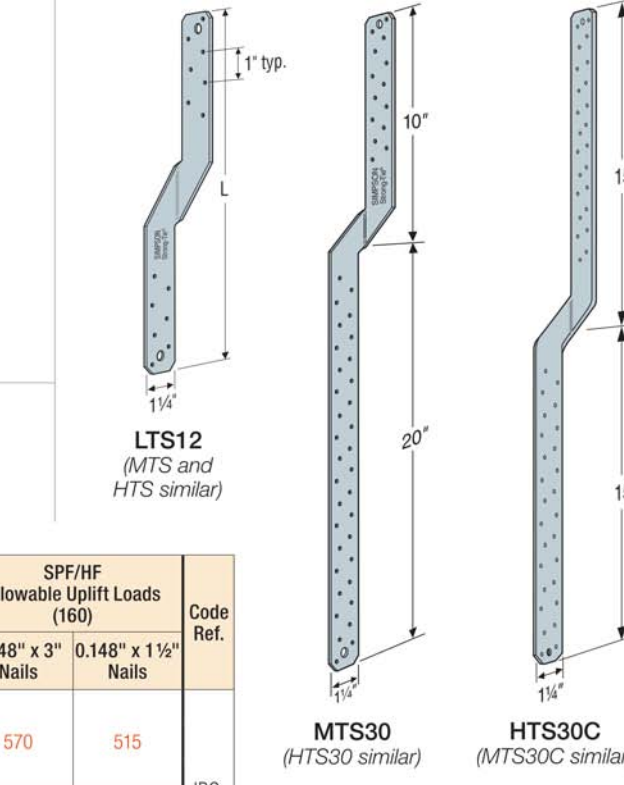
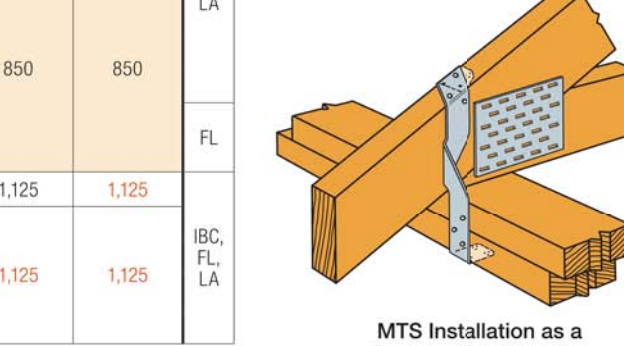


Table with columns for Model No., Strap Length (in.), Total Quantity of Fasteners (Nails), DF/SP Allowable Uplift Loads (lb), and SP/HF Allowable Uplift Loads (lb).



1. See pp. 260-261 for Straps and Ties General Notes.

2. LTS12 through LTS20, MTS16 through MTS30, and HTS24 through HTS30C (except HTS30C have additional nail holes).

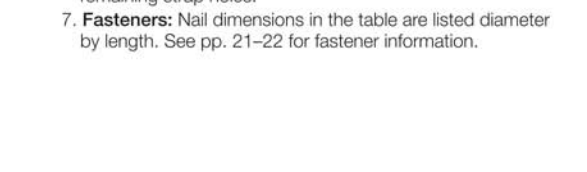
3. All straps except the MTS30 and HTS30 have the twist in the center of the strap.

4. Fast straps do not need to be wrapped over the truss to achieve the allowable load.

5. May be installed on the inside face of the stud.

6. Allowable lateral loads are Ft = 75 lb. and Fy = 125 lb. when the following installation requirements are met. The first seven nail holes on each side of the bond must be filled with 0.148" x 1 1/2" minimum nails. All additional fasteners may be installed in any remaining strap holes.

7. Fasteners: Nail dimensions in the table are listed diameter by length. See pp. 21-22 for fastener information.



REVISION TABLE with columns for NUMBER, DATE, REVISION BY, DESCRIPTION.

DRAWINGS FOR: Martin Garage Replacement, 664 Sterling Drive, James Island, SC 29412-9136

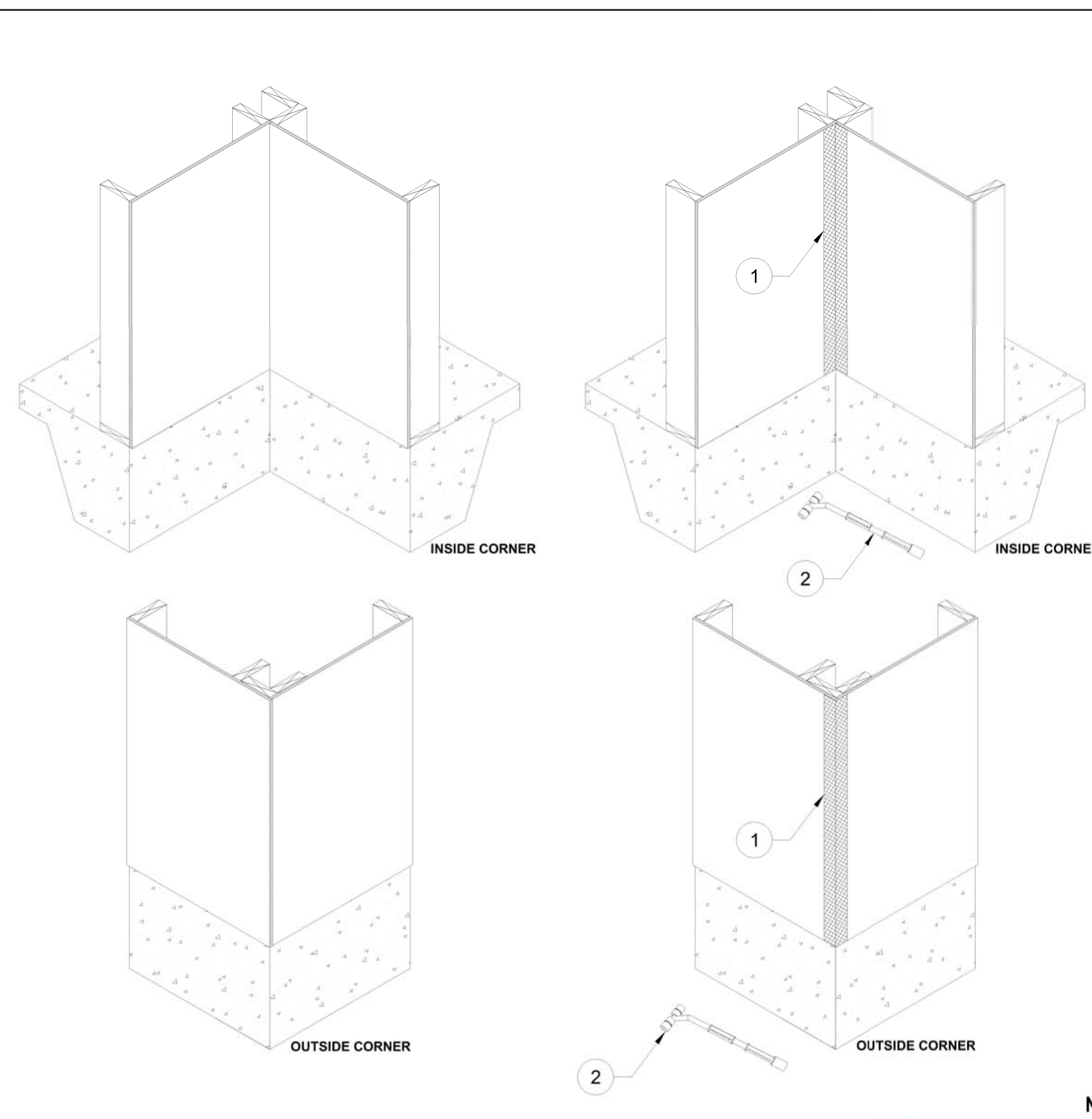
Simpson Data Sheets

DRAWINGS PROVIDED BY: RW Martin, 2138 Dorchester Road, N. Charleston, SC 29405-7776, (843) 747-5099

DATE: 1/18/2021

SCALE: NONE

SHEET: F-4



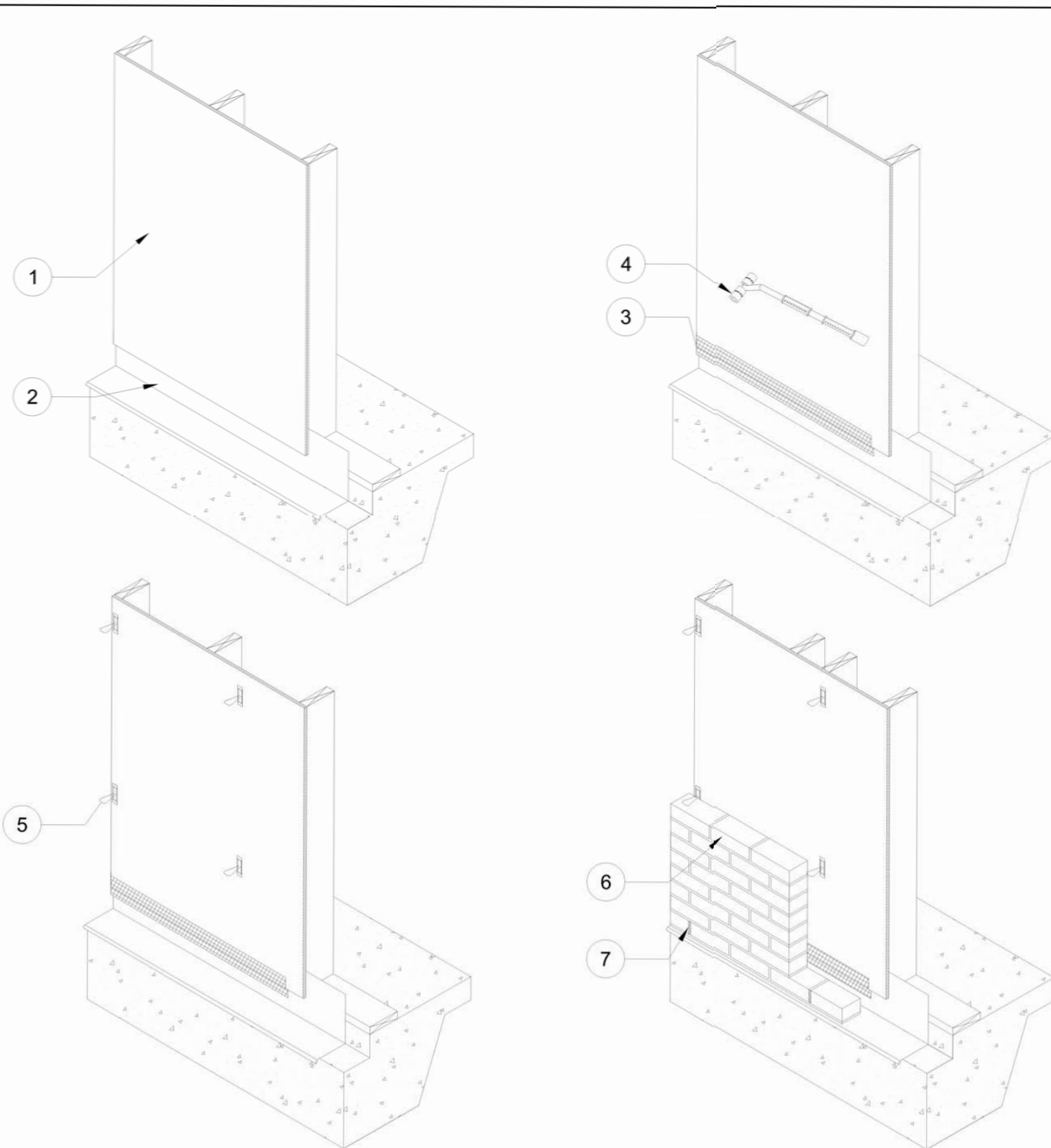
HUBER ENGINEERED WOODS

- ZIP SYSTEM™ TAPE.
- ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.

TIP: WHEN INSTALLING ZIP SYSTEM™ TAPE ON AN INSIDE CORNER USE ARM LENGTHS PORTIONS OF TAPE AT A TIME. WORK THE TAPE INTO THE CORNER USING A TOOL SUCH AS A PLASTIC SPEED SQUARE TO ENSURE A TIGHT CORNER IS INSTALLED.

NTS

05-11-2018 ZIP SYSTEM® SHEATHING AT INSIDE AND OUTSIDE CORNERS **D-1** Questions? Call us at 800.933.9220 ext. 2716 or visit our website at zipssystem.com ZIPsystem SHEATHING & TAPE



HUBER ENGINEERED WOODS

- ZIP SYSTEM® SHEATHING.
- CODE APPROVED BASE FLASHING INSTALLED BEHIND SHEATHING.
- INSTALL ZIP SYSTEM™ TAPE (OR ADHESIVE BACKED FLASHING MEETING AAMA 711 OR AC148) ALONG THE BOTTOM OF ZIP SYSTEM® SHEATHING AND THEN TUCK IT BACK ALONG THE BOTTOM EDGE OF THE PANEL AND ONTO THE SURFACE OF THE CODE APPROVED BASE FLASHING.
- ZIP SYSTEM ROLLER. ROLL ALL TAPE.
- BRICK VENEER ANCHORS (TIES)* SHALL BE ANCHORED TO WALL STUDS THROUGH ZIP SYSTEM® SHEATHING. INSTALL AN AIR SPACE PER DESIGNER OF RECORD OR GOVERNING CODE. THE MOST STRINGENT SHOULD BE FOLLOWED.
- ANCHORED MASONRY BRICK VENEER.
- INSTALL WEEP HOLES AS PRESCRIBED BY LOCAL BUILDING CODE.

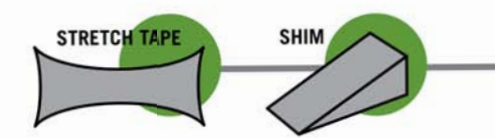
*ANY CODE APPROVED BRICK VENEER ANCHORS (TIES) CAN BE USED.

NTS

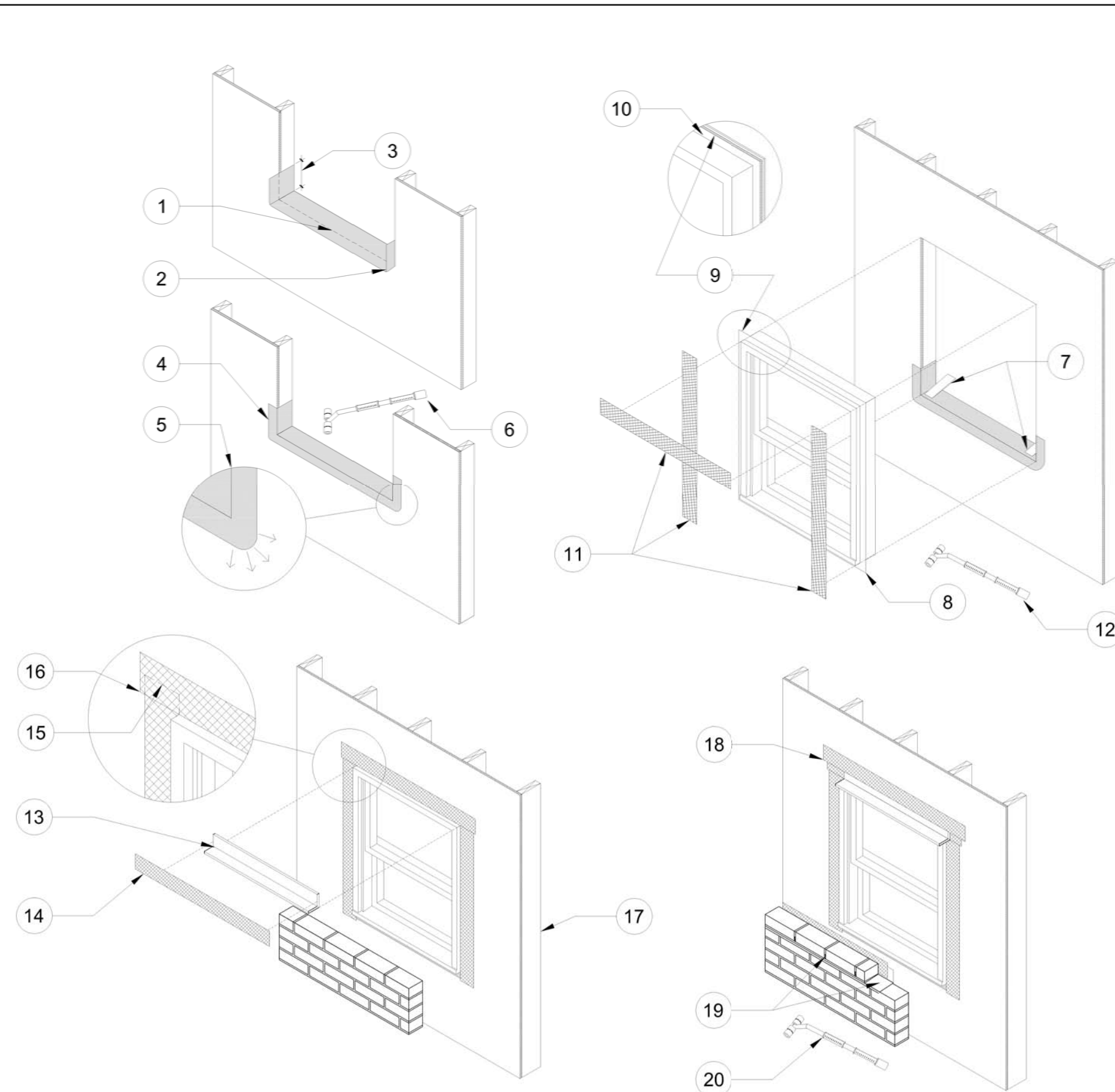
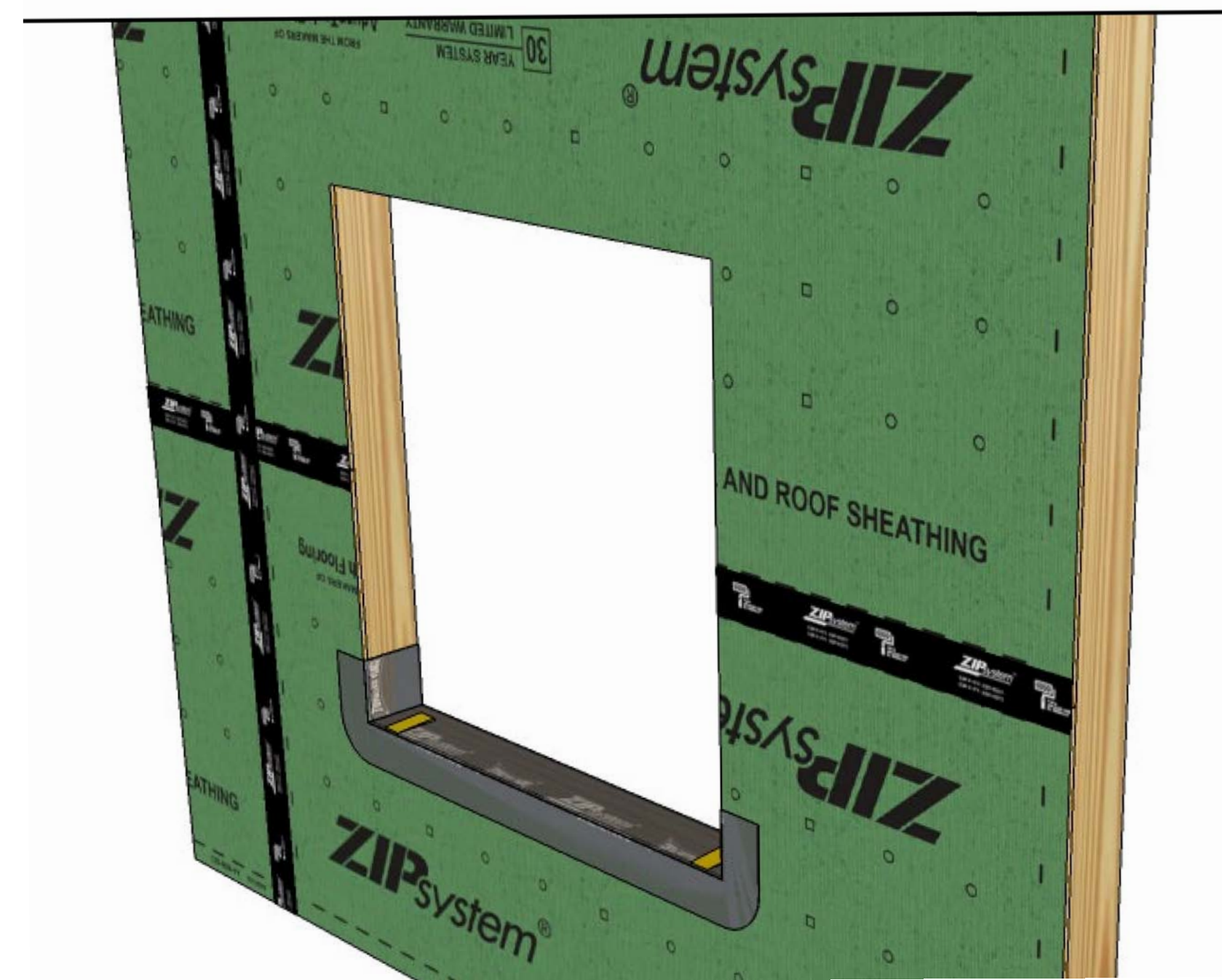
05-31-2018 ZIP SYSTEM® SHEATHING AND TYPICAL BRICK VENEER AT SLAB ON GRADE - OPT B **B-1** Questions? Call us at 800.933.9220 ext. 2716 or visit our website at zipssystem.com ZIPsystem SHEATHING & TAPE

ZIP SYSTEM® WALL SHEATHING // COMMON DETAIL

WINDOW // FLANGED WINDOW



STEP 1: Install a piece of ZIP System™ stretch tape and install shims window per manufacturer's installation guidelines.



HUBER ENGINEERED WOODS

- CENTER ZIP SYSTEM™ STRETCH TAPE ON WINDOW SILL AND PRESS FIRMLY FROM THE CENTER, TO THE CORNERS AND THEN UP THE JAMBS.
- ENSURE ZIP SYSTEM™ STRETCH TAPE FITS TIGHTLY INTO THE CORNERS.
- EXTEND ZIP SYSTEM™ STRETCH TAPE UP THE JAMBS A MINIMUM OF 6-INCHES.
- EXTEND ZIP SYSTEM™ STRETCH TAPE ON THE FACE OF THE ZIP SYSTEM™ PANEL A MINIMUM OF 2-INCHES.
- WHEN ROLLING THE TAPE ONTO THE PANEL'S SURFACE, START WITH THE CORNERS.
- ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.
- SHIMS AS REQUIRED BY THE WINDOW MANUFACTURER.
- INSTALL GAPS IN THE SEALANT PER WINDOW MANUFACTURER.
- APPLY A CONTINUOUS BEAD OF SEALANT* AROUND THE BACK SIDE (INTERIOR SURFACE) OF THE WINDOW MOUNTING FLANGE.
- INSIDE SURFACE OF WINDOW FLANGE.
- ZIP SYSTEM™ TAPE OR ADHESIVE BACKED FLASHING (MEETING AAMA 711 OR AC148).
- ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.
- STEEL LINTEL INSTALLED PER WINDOW MANUFACTURER OR DESIGNER OF RECORD.
- ZIP SYSTEM TAPE™ OR ADHESIVE BACKED FLASHING (MEETING AAMA 711 OR AC148).
- ENSURE JAMB FLASHING DOES NOT EXTEND MORE THAN HALF WAY THROUGH THE HEAD FLASHING.
- EXTEND THE HEAD FLASHING BEYOND THE JAMB FLASHING A MINIMUM OF 1-INCH.
- FROM THE INTERIOR, INSTALL LOW PRESSURE POLYURETHANE FOAM BETWEEN WINDOW AND ROUGH OPENING. IF GAP IS TOO NARROW USE A COMPATIBLE CAULK SEALANT*.
- EXTEND THE HEAD FLASHING BEYOND THE JAMB FLASHING A MINIMUM OF 1-INCH.
- INSTALL FLASHING AND WEEP SCREEDS AS REQUIRED BY BRICK MANUFACTURER OR LOCAL BUILDING CODE.
- ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.

*WHEN APPLYING A SEALANT TO ZIP SYSTEM TAPE, USE A BUTYL, 100% SILICONE OR POLYURETHANE SEALANT.

NTS

05-21-2018 ZIP SYSTEM® SHEATHING AT TYPICAL FLANGED WINDOW WITH BRICK VENEER **W-4** Questions? Call us at 800.933.9220 ext. 2716 or visit our website at zipssystem.com ZIPsystem SHEATHING & TAPE

REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Zip Sheathing Details

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:
1/18/2021

SCALE:
NONE

SHEET:
D-2

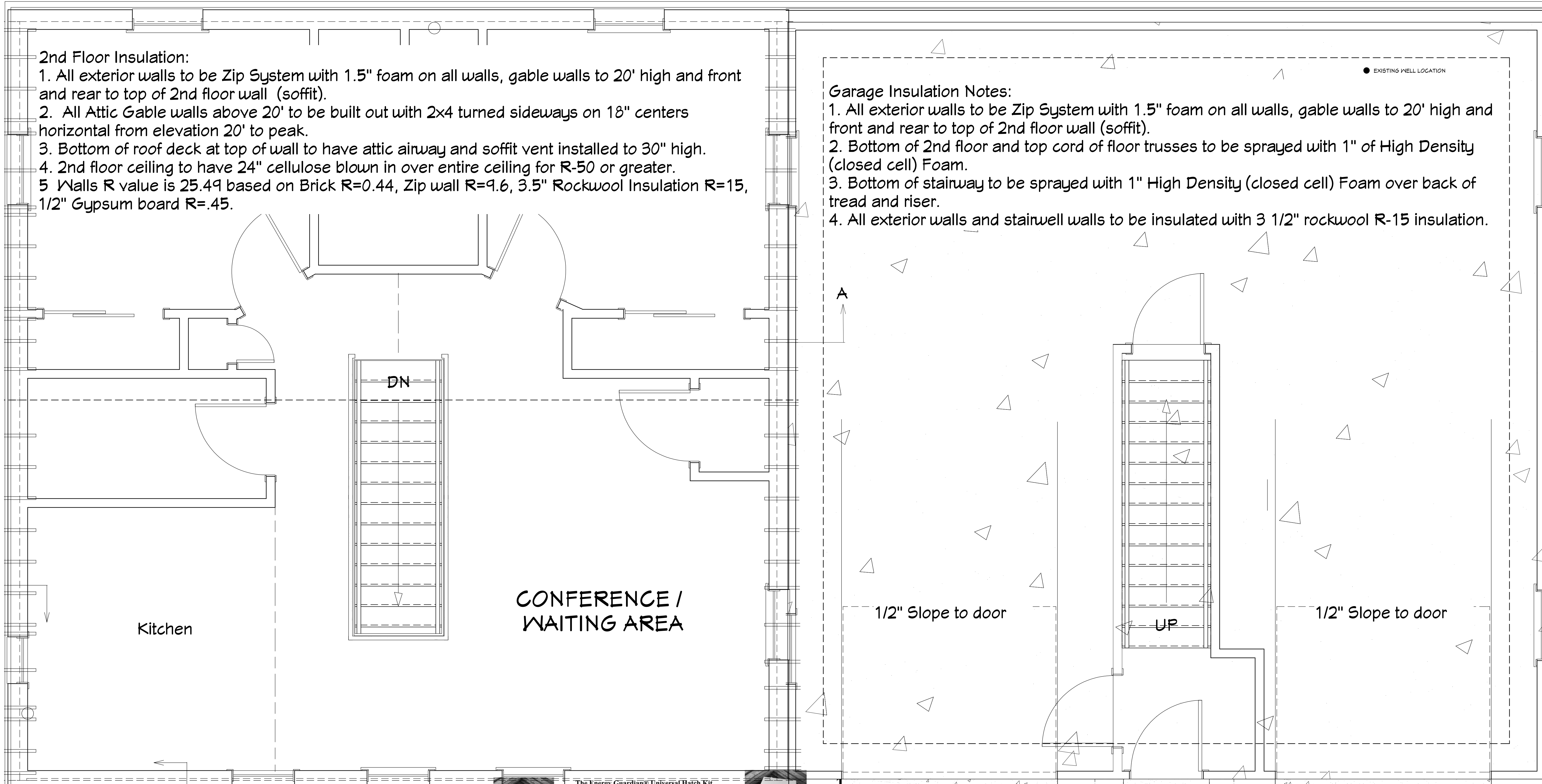
Zip System Liquid Flash Shall be used on all nail heads, brick tie fastened to zip board and at all penetrations through Zip System to ensure exterior vapor barrier.

2nd Floor Insulation:

1. All exterior walls to be Zip System with 1.5" foam on all walls, gable walls to 20' high and front and rear to top of 2nd floor wall (soffit).
2. All Attic Gable walls above 20' to be built out with 2x4 turned sideways on 18" centers horizontal from elevation 20' to peak.
3. Bottom of roof deck at top of wall to have attic airway and soffit vent installed to 30" high.
4. 2nd floor ceiling to have 24" cellulose blown in over entire ceiling for R-50 or greater.
5. Walls R value is 25.49 based on Brick R=0.44, Zip wall R=9.6, 3.5" Rockwool Insulation R=15, 1/2" Gypsum board R=.45.

Garage Insulation Notes:

1. All exterior walls to be Zip System with 1.5" foam on all walls, gable walls to 20' high and front and rear to top of 2nd floor wall (soffit).
2. Bottom of 2nd floor and top cord of floor trusses to be sprayed with 1" of High Density (closed cell) Foam.
3. Bottom of stairway to be sprayed with 1" High Density (closed cell) Foam over back of tread and riser.
4. All exterior walls and stairwell walls to be insulated with 3 1/2" rockwool R-15 insulation.



NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Insulation

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:
1/18/2021

SCALE:
1/2" = 1'

SHEET:
1-1

The Energy Guardian® Universal Hatch Cover

Product Attributes

The Energy Guardian® Universal Hatch Cover is a system made of high density expanded polystyrene. This material is safe, emits virtually no off gassing and provides increased insulating value as the outside temperature decreases. (See table on reverse) The Kit has an R-20 insulating value (shipping weight of 7 lbs.). An alternate version has an R-38 insulating value (shipping weight of 10 lbs.). Accessory packs are available to increase the R-Value to R-49 or higher in order to meet any local requirements.

The patented design of the Kit provides several important advantages:

- As an assembled system, it meets all requirements of the 2009 & 2012 editions of the International Energy Conservation Code (IECC), International Residential Code (IRC) and other Federal and State mandates. It contains both the high insulating value and durable air seal needed to stop the energy loss due to the attic access.
- The separate frame provides the required wood or equivalent protective barrier.
- Provides a consistent, professional solution
- Lightweight lid for use by all ages
- Fast, easy installation

Uses

The Energy Guardian® Universal Hatch Cover closes the gap in the building thermal barrier created by attic hatch accesses in existing as well as newly constructed residential housing, causing reduced energy costs in both hot and cold weather.

The product is designed to cover attic access panels in stick-built or trussed roof construction.

When properly installed, the system will stop a major source of energy loss in both hot and cold weather, improve the comfort of the home, save on both heating and cooling costs and eliminate a major cause of ice damming and mold.

The Energy Guardian® Universal Hatch Cover

Product Ratings

The Energy Guardian® Universal Hatch Cover is made of expanded polystyrene which has been manufactured and tested in accordance with ASTM C578. A1-factor x-Area (UA) Calculation results in an R-Value of R-20 for the The Energy Guardian Universal Hatch Cover (see Note 1 below for more information).

In ASTM E84 tests, the material had a Flame Spread Rating of less than 25 and Smoke Developed Rating of less than 450. The product meets the 2009 and 2012 IECC and IRC Code requirements for attic access openings. It can also be used to meet the requirements for attic entrances in the Department of Energy's 2013 Standard Work Specifications and the ENERGY STAR® Version 3 Inspection Checklist (specifically, the Thermal Enclosure System Rater Checklist).

Warranties

ESS Energy Products, Inc. warrants that it will replace without charge The Energy Guardian® Universal Hatch Cover that is not merchantable because of defects in material or workmanship for a period of 20 years from the date of purchase. This warranty is void only if the Kit has been installed according to the written instructions provided by ESS Energy Products, Inc. and the warranty card is received by ESS Energy Products, Inc. within 30 days of the date of purchase. The warranty is void if the unit has been damaged due to accident, vandalism, misuse, abuse, or natural catastrophe such as fire, or acts of God. ESS Energy Products, Inc. shall not be liable for damages in excess of the purchase price. This is the sole and exclusive remedy and liability for defects or failure of this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESSED OR IMPLIED.

What You Should Know About R-Values

R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy. To get the marked R-value, it is essential that this insulation be installed properly.

There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you'll save on fuel.

NOTE: Using a UA Calculation, The Energy Guardian Universal Hatch Cover was determined to have an R-Value of R-20 at 75°F. Additional R-Value that could be gained using surface film, trapped air and the thermal resistance of the hatch assembly itself were not taken into account in the above calculations.

Temperature	Thermal Resistance (R-Value)
at 75°F	R-20
at 40°F	R-22

For more information go to www.essenergy.com or call 1-877-ESS-4NDU. The Energy Guardian® Kits are a registered trademark of ESS Energy Products, Inc. The Energy Guardian® Universal Hatch Kit is protected under United States Patent Numbers 7,690,722 B1, 8,869,470 B2 and other patents pending. Copyright © 2011-2015. All rights reserved.

The Energy Guardian® Universal Hatch Kit

Installation Instructions

The Energy Guardian® Universal Hatch Kit install easily with minimal tools needed. Our premium, high-density EPS, combined with enclosed weather-stripping, provides an effective solution that will save energy and improve the comfort of your home.

Installation of the Universal Hatch Kit consists of insulating your hatch cover, weather-stripping your hatch opening and mounting a protective barrier inside your attic. Components of the kit are listed on the back.

Universal Hatch Kit Components

Here are the components of the Universal Hatch Kit and their role in insulating your attic hatch opening.

Installation Instructions are on the back side of this page

- 1. Insulation Block**
Our Premium, High Density EPS provides the insulating value for your hatch cover. When installed on the attic side of the hatch cover, the Insulation Block provides an insulating value. The ESS Energy Products, Inc. label, with designated insulating value, is installed on the attic side.
- 2. Barrier Sections (x4)**
The assembled Protective Barrier provides a structure that prevents insulation, dust and debris from falling through the attic opening into your home. The Protective Barrier is glued to the joists which define the perimeter of the attic opening, inside the attic. These four (4) Barrier Sections are glued together to make the Protective Barrier.
- 3. Joist Framing Unit (x2)**
Joist Framing Units are glued to the outside of two opposite sides of the Protective Barrier. They slide down into the floor joist and prevent insulation, dust and debris from entering the attic opening, under the barrier frame.
- 4. Weather-stripping**
Weather-stripping is installed where attic hatch cover sits on the trim of the hatch opening that keeps it in place. Weather-stripping prevents air from leaking into the home from the attic. It is essential that Weather-stripping provides a complete seal around the perimeter of the attic opening with no gaps.
- 5. Energy Guardian® Speed Adhesive**
The Energy Guardian® Speed Adhesive is included for bonding components together. Cut a small corner off the pouch and apply where needed. Apply in a thin bead or in a spot the size of a nickel for maximum adhesion. Set time is approximately 20 minutes. Keep at room temperature prior to use.

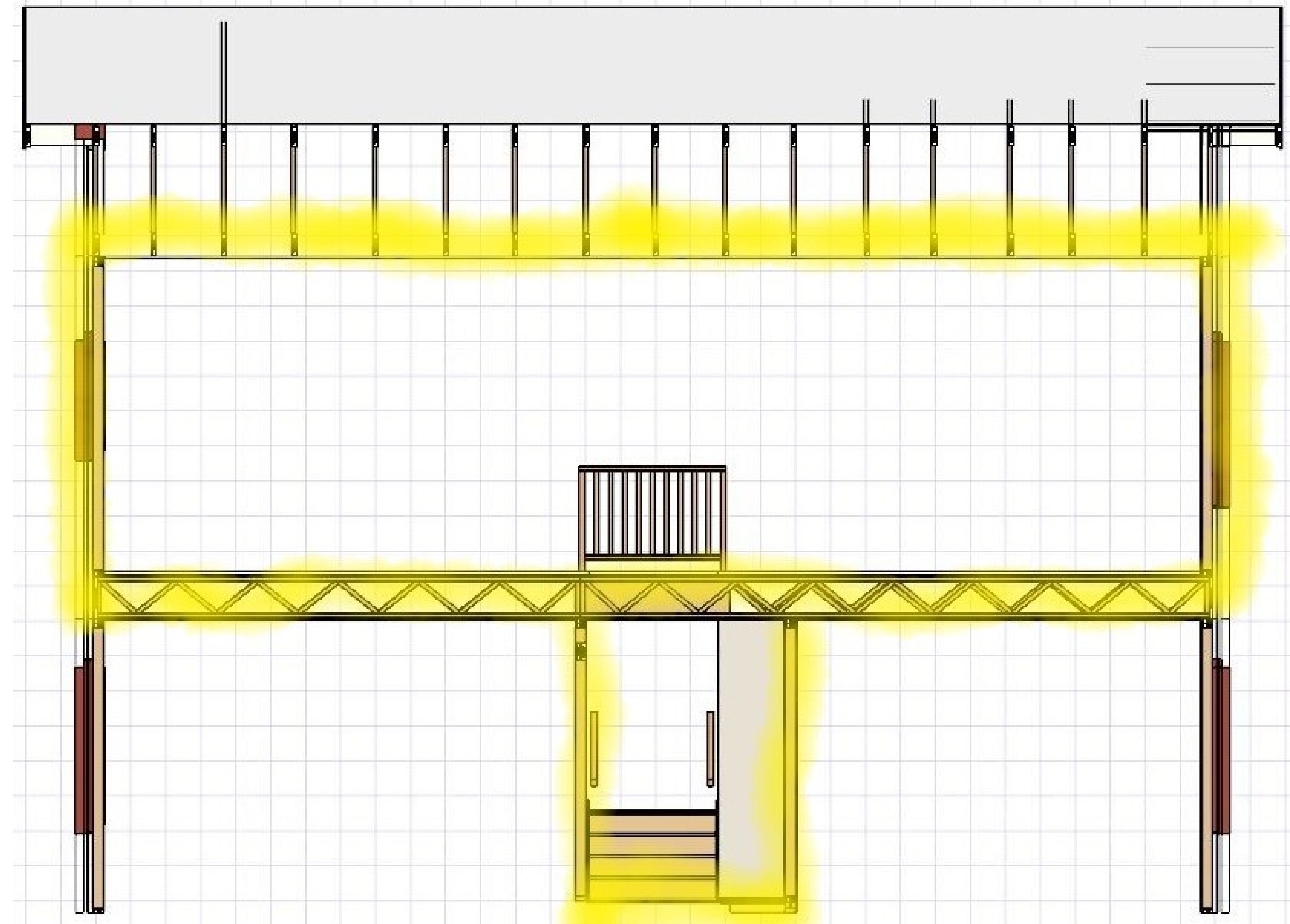
1. Attic access to be 22" x 29" in size.
2. Hatch to lay in trim boards with gasket installed on trim board and 3/4" plywood hatch. Insulation from universal hatch cover to be glued on plywood.
3. Hatch to have a greater than R-38 insulation value.



Front Elevation

Windborne Debris Protection Method

1. Building exterior brick.
2. Windows Protected by moveable/closeable shutters with latches.
3. Garage door rated for W6.
4. Front Door Solid wood.



BUILDING THERMAL ENVELOPE Drawing

1. All exterior walls to be Zip wall as air barrier and 1.5" foam insulation.
2. Attic to have blown in 24" insulation as air barrier.
- 3: Garage ceiling / Office floor to have 2" closed cell spray foam installed as a barrier and insulation sprayed on the bottom of the floor and encapsulating top 2x4 cord of the floor trusses.

NUMBER	DATE	REVISION	TABLE BY	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Building Thermal Envelope
 Windborne Debris Protection

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

SCALE:

1/2" = 1'

SHEET:

1-2



Submittal Data: 9RLS3Y
Inverter Driven Heat Pump



9,000 BTU Wall Mount



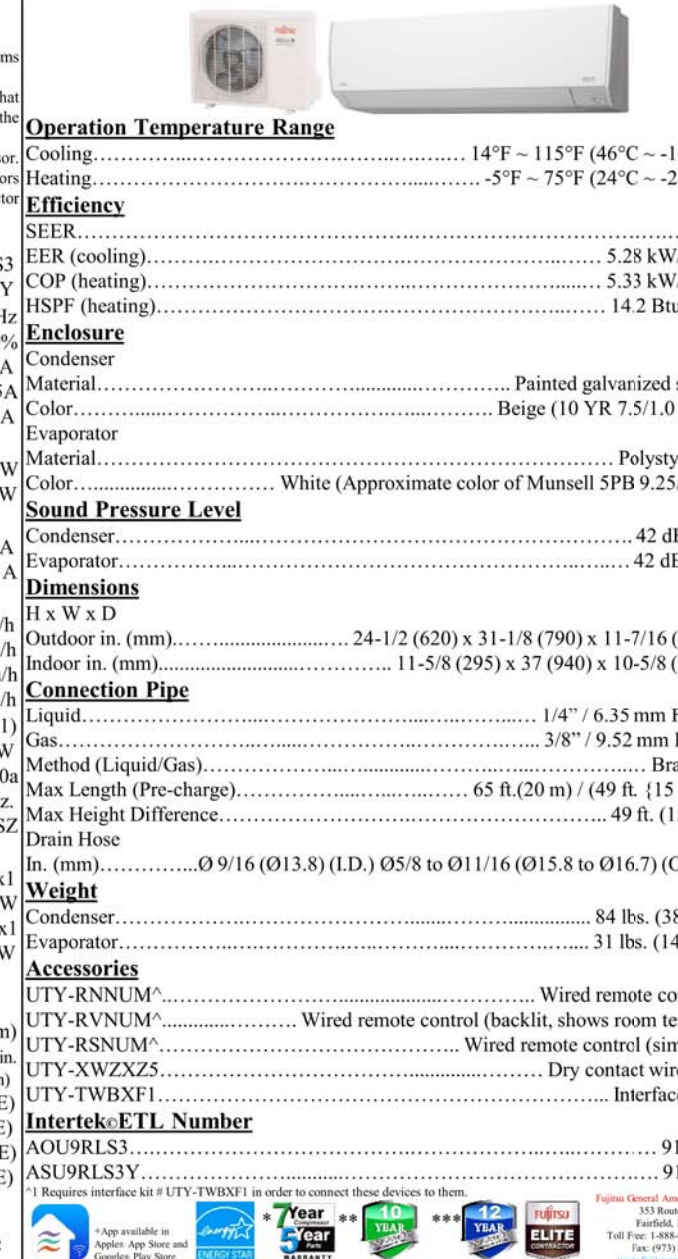
Dimensions: 9RLS3Y



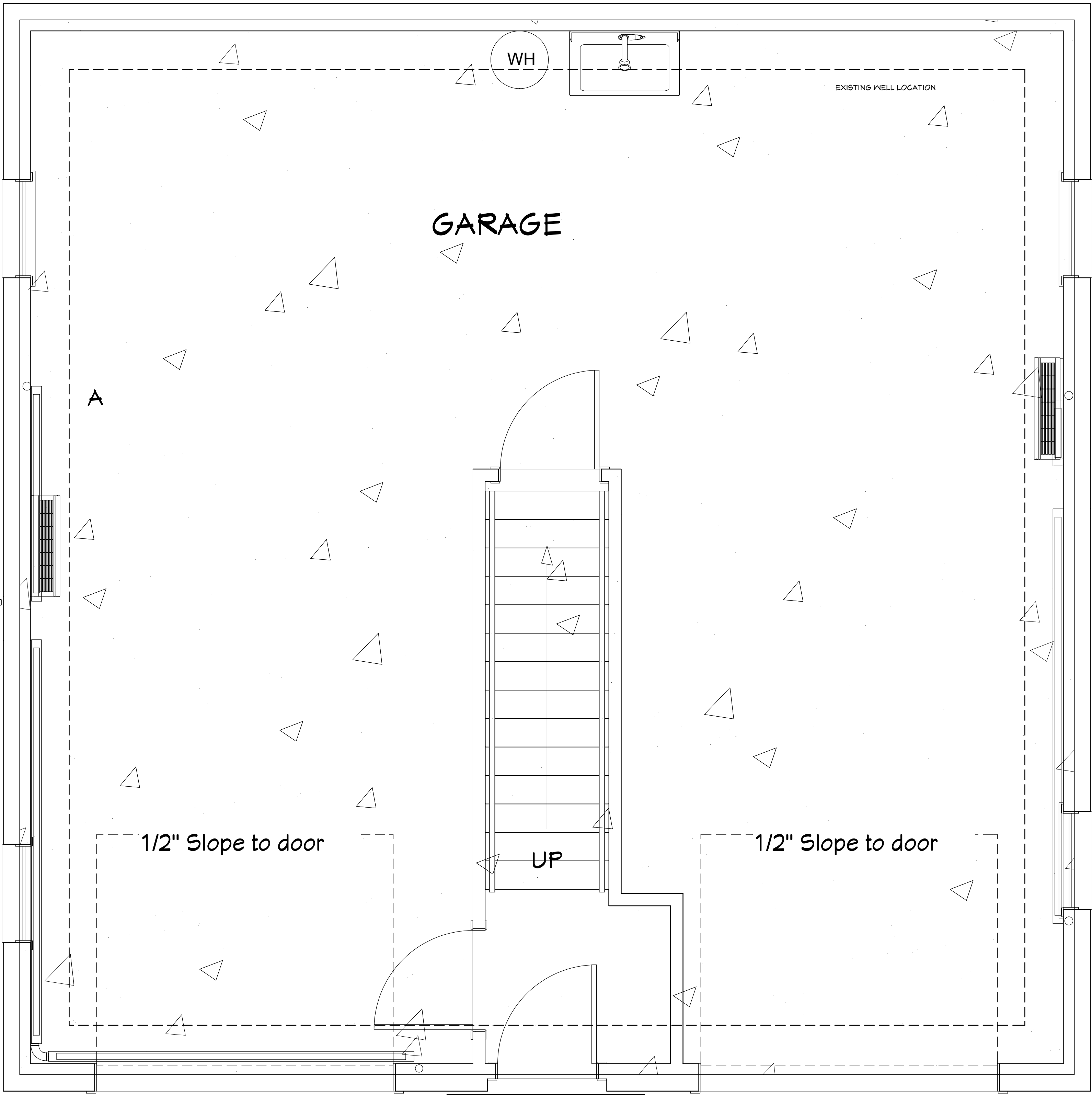
(Unit in. mm)

Job Name: _____ Date: _____
 Location: _____ Approval: _____
 Engineer: _____ Construction: _____
 Submitted to: _____ Unit #: _____
 Submitted by: _____ Drawing #: _____
 Reference: _____

General Features	
• Wi-Fi or wireless remote	Standard Warranty: 5 years parts, 7 years compressor. Applies to systems purchased before June 1 st 2015.
• Wi-Fi or wireless remote	Standard Warranty: 5 years parts, 7 years compressor. Applies to systems purchased after June 1 st 2015.
• High performance heating	Standard Warranty: 10 years parts, 10 years compressor. Systems that have been installed on or after June 1 st 2015 by licensed contractors and the online Product Registration has been submitted.
• Energy Saving Program	Elite Contractor Extended Warranty: 12 years parts, 12 years compressor. Systems that have been installed on or after June 1 st 2015 by contractor who have met requirements and have been approved for elite contractor status plus, the online Product Registration has been submitted.
• Weekly timer	• Elite Contractor Extended Warranty: 12 years parts, 12 years compressor. Systems that have been installed on or after June 1 st 2015 by contractor who have met requirements and have been approved for elite contractor status plus, the online Product Registration has been submitted.
• Dry mode	• Elite Contractor Extended Warranty: 12 years parts, 12 years compressor. Systems that have been installed on or after June 1 st 2015 by contractor who have met requirements and have been approved for elite contractor status plus, the online Product Registration has been submitted.
• *World mode	• Elite Contractor Extended Warranty: 12 years parts, 12 years compressor. Systems that have been installed on or after June 1 st 2015 by contractor who have met requirements and have been approved for elite contractor status plus, the online Product Registration has been submitted.
Model Information	
Condenser	AOU9RLS3
Evaporator	ASU9RLS3Y
Electrical	208/230V AC, 1ph-60Hz
Electrical	
Available Voltage Range	208-230 +/-10%
Minimum Circuit Ampacity	13.4 A
Max Fuse Size	15A
Max Starting Current	23.3 A
Input Power	
Cooling	0.5 kW
Heating	0.66 kW
Running Current	
Cooling	2.5 A
Heating	3.3 A
Capacity	
Nominal Cooling	9,000 Btu/h
Min-Max Cooling	3,100-12,000 Btu/h
Nominal Heating	12,000 Btu/h
Min-Max Heating	3,100-22,000 Btu/h
Compressor	
Compressor	Rotary (inv. x1)
Motor Output	850 W
Refrigerant	R410A
Charge	2 lbs. 14 oz.
Oil	FREOL oil
Drain Hose	1/2" (12.7 mm)
Fan Motor	
(Condenser) Type	DC
(Condenser) Motor Output	Propeller x1
(Evaporator) Type	DC
(Evaporator) Motor Output	Cross flow fan x1
Heat Exchanger (Condenser (C) Evaporator (E))	
Dimensions (H x W x D)	23-1/8 x 34-1/16 x 1-7/16 in. (588x881x36.4 mm)
Condenser	Main 15-1/8 x 28-3/8 x 1-3/16 in. (384x726x30) Sub 3-5/16 x 28-3/8 x 1/2 in. (84x726x13.3 mm) 4-15/16 x 28-3/8 x 1/2 in. (126x726x13.3 mm)
Evaporator	Main 21-1/8 x 28-3/8 x 1-3/16 in. (541x726x30) Sub 3-5/16 x 28-3/8 x 1/2 in. (84x726x13.3 mm) 4-15/16 x 28-3/8 x 1/2 in. (126x726x13.3 mm)
Fin Pitch	20 FPI (C) Main 21 FPI Sub 18 FPI (E)
Rows x Stages	2 x 28 (C) Main 3 x 24 Sub 1 x 10 (E)
Pipe Type (Material)	Copper (C) Copper (E)
Fin Type (Material)	Aluminum (C) Aluminum (E)
Fin Type (Material)	Aluminum (C) Aluminum (E)
Fin Type (Material)	Aluminum (C) Aluminum (E)
Fin Type (Material)	Aluminum (C) Aluminum (E)



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HVAC Notes

1. All Mini Split units to be System 9RLFW1- ENERGY STAR® Qualified or better.
2. 3" PVC to be installed in walls behind unit to allow chase for wiring and piping between outside unit and inside unit. PVC Gutter to be used in garage as horizontal chase for wiring and piping.
3. Exterior units to be mounted on brick wall using Lowes Item # 986208 Model # BPC-3LP DuctlessAir Hold-Up Air Conditioner Support Bracket or better.
4. All supply and return lines are to one continuous copper line insulated with 3/4" Foam Plumbing Tubular Pipe Insulation with 3/4 thickness from indoor unit to outdoor condenser.
5. Drain line to be 1/2" PVC from back of unit to chase between floors, install trap, continue down inside exterior wall and out to the exterior and the top of the foundation through the brick.
6. The HVAC contractor shall (1) install equipment according to present mechanical codes and manufacturer's installation instructions, (2) properly air seal the home's penetrations where they are penetrated through the exterior walls and (3) properly vacuum lines to 50-100 microns, wait 10 minute to verify no leaks, take a picture for verification on each unit prior to releasing the pre-charge from the units.
7. Electrical Contractor to provide a non fusible disconnect for each exterior unit equal to or better than Lowe's Item # 95578 Model # DPU222RP Eaton 60-Amp Non-Fusible Metallic Disconnect.

HVAC Estimate Pipe Length used for estimating. All lengths are +/- 10%	Length .5" Drain Line (ft)	Length 3/8"Supply Line (ft)	Length 1/4"Return Line (ft)
Kitchen HVAC	20	46	46
Conference HVAC	20	32	32
Office 1 HVAC	20	22	22
Office 2 HVAC	20	22	22
Garage Right HVAC	10	10	10
Garage Left HVAC	10	10	10

REVISION	DATE	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

1st Floor Mech

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:
 1/18/2021

SCALE:
 1/2" = 1'

SHEET:
 MEP-1

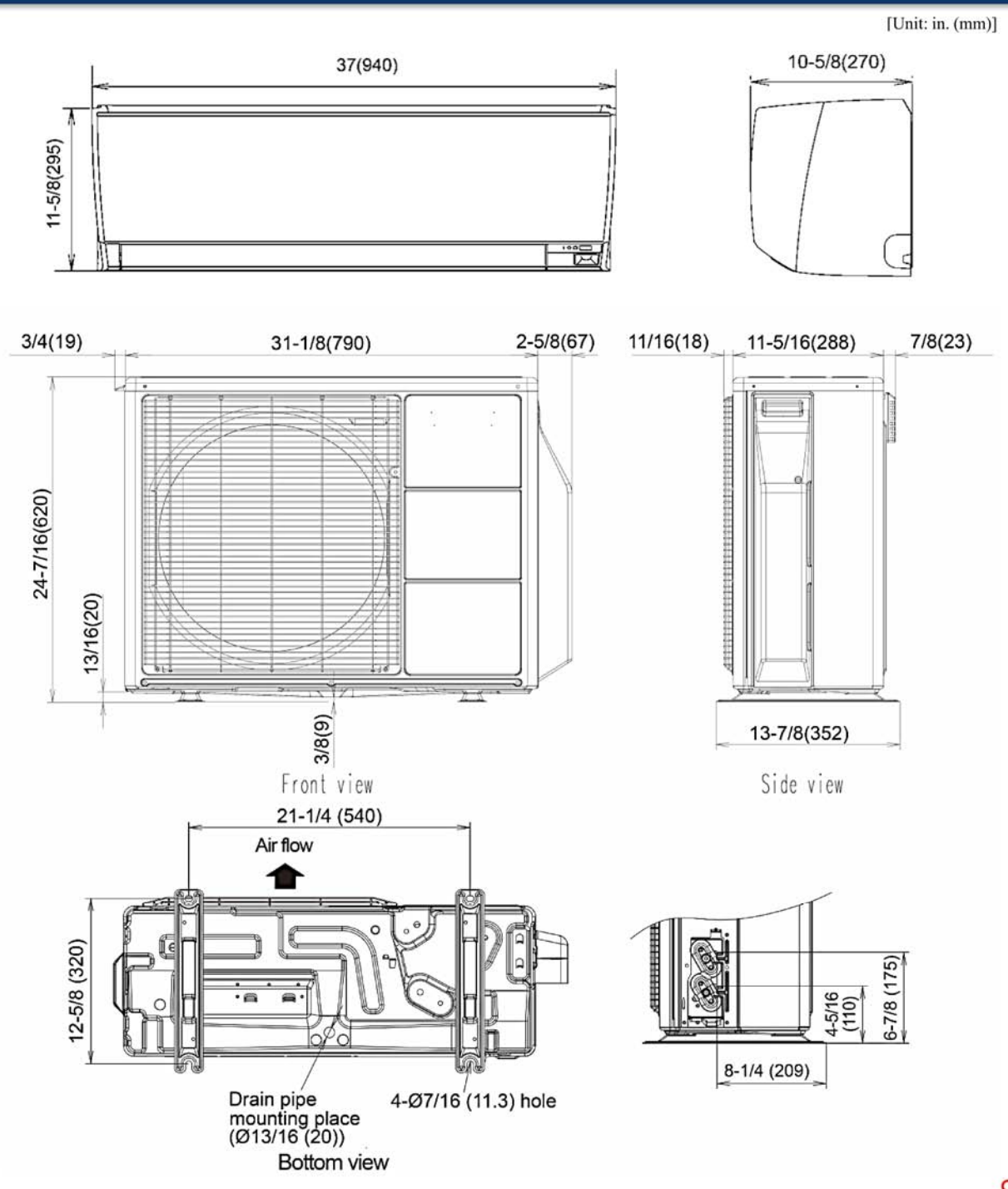
FUJITSU
 Submittal Data: 9RLS3Y
 Inverter Driven Heat Pump

Halcyon
 9,000 BTU Wall Mount

Job Name: _____ Date: _____
 Location: _____ Approval: _____
 Engineer: _____ Construction: _____
 Submitted to: _____ Unit #: _____
 Submitted by: _____ Drawing #: _____
 Reference: _____

FUJITSU
 Dimensions: 9RLS3Y

(Unit in. (mm))



General Features

- Wired or wireless remote
- High performance heating
- Energy Saving Program
- Eco mode
- Powerful mode

Model Information

Condenser: AOU9RLS3Y
 Evaporator: ASU9RLS3Y
 Electrical: 208/230V AC 1ph-60Hz
 Available Voltage Range: 208/230V +/- 10%
 Minimum Circuit Amperage: 13.4 A
 Max Fuse Size: 15A
 Max Starting Current: 3.3 A
 Input Power: 0.5 kW
 Heating: 0.66 kW
 Running Current: 2.5 A
 Cooling: 3.3 A

Capacity

Nominal Cooling: 9,000 Btu/h
 Min-Max Cooling: 3,100-12,000 Btu/h
 Nominal Heating: 12,000 Btu/h
 Min-Max Heating: 3,100-22,000 Btu/h

Compressor

Motor Output: 450 W
 Refrigerant: R410a
 Charge: 2 lbs. 14 oz.
 Oil: FREOL 68/52

Fan Motor

(Condenser) Type: DC
 (Condenser) Motor Output: 49 W
 (Evaporator) Type: DC
 (Evaporator) Motor Output: 61 W

Heat Exchanger (Condenser (C) Evaporator (E))

Dimensions (H x W x D): 23-1/8 x 34-11/16 x 1-7/16 in. (588x881x36.4 mm)
 Evaporator: Main 15-1/8 x 28-3/8 x 1-3/16 in. (384x720x30) Sub 3-5/16 x 28-3/8 x 1/2 in. (84x201.3 x 12.7) 4-1/16 x 28-3/8 x 1/2 in. (106x720x12.7) mm
 Fin Pitch: 20 FPI (C) Main 3 x 24 Sub 1 x 10 (E)
 Rows x Stages: 2 x 28 (C) Main 3 x 24 Sub 1 x 10 (E)
 Pipe Type (Material): Copper (C) Copper (E)
 Fin Type (Material): Aluminum (C) Aluminum (E)

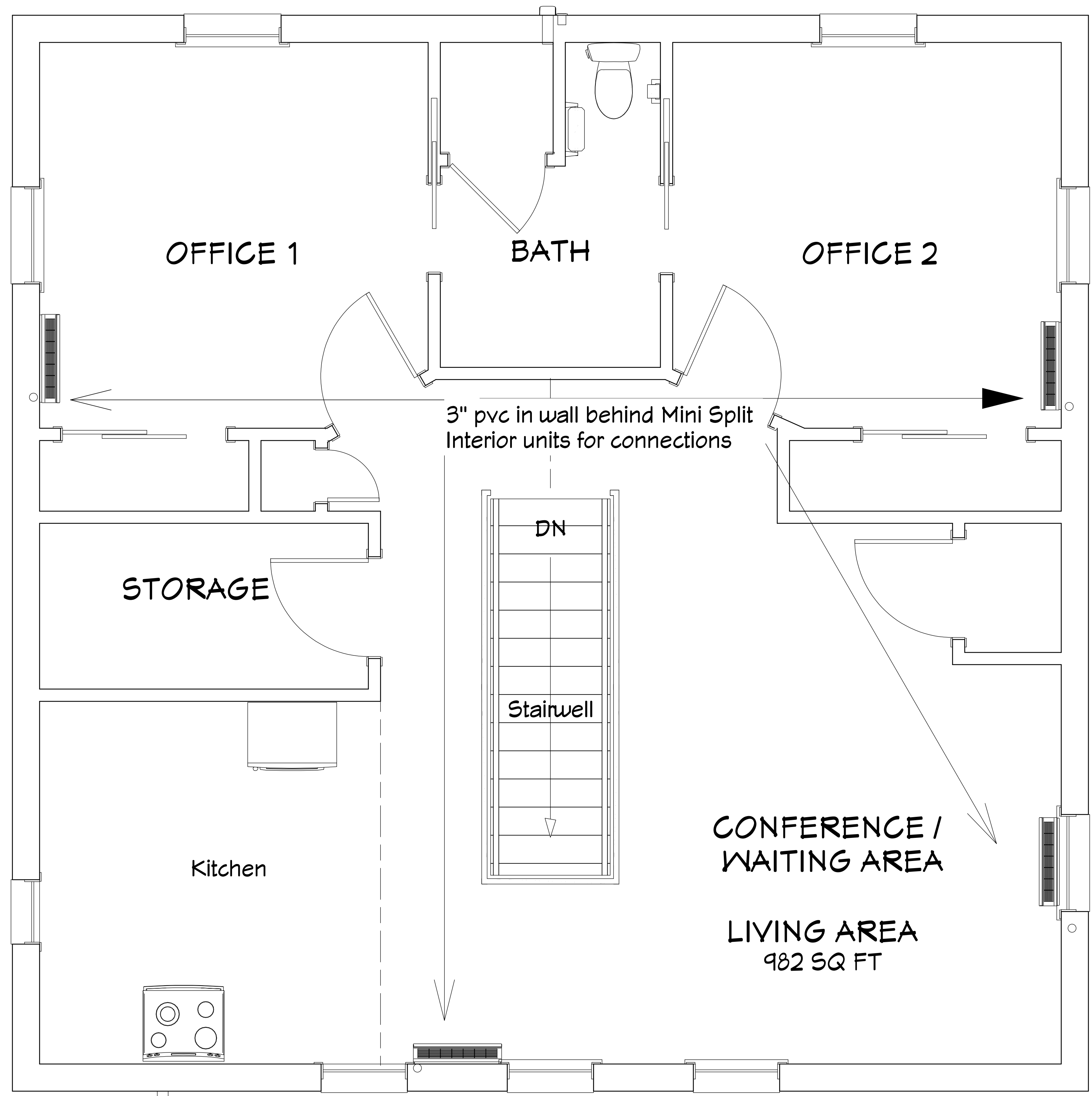
Accessories

UTY-RNNUM: Wired remote control
 UTY-RVNUM: Wired remote control (backlit, shows room temp.)
 UTY-RSNUM: Wired remote control (simple)
 UTY-XWZXS: Dry contact wire kit
 UTY-TWBXF1: Interface kit

Interlock ETL Number

ASUSRLS3Y: 91986

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HVAC Notes

1. All Mini Split units to be System 9RLFN1- ENERGY STAR® Qualified or better.
2. 3" PVC to be installed in walls behind unit to allow chase for wiring and piping between outside unit and inside unit. PVC Gutter to be used in garage as horizontal chase for wiring and piping.
3. Exterior units to be mounted on brick wall using Lowes Item # 986208 Model # BPC-3LP Ductless Aire Hold-Up Air Conditioner Support Bracket or better.
4. All supply and return lines are to be one continuous copper line insulated with 3/4" Foam Plumbing Tubular Pipe Insulation with 3/4" thickness from indoor unit to outdoor condenser.
5. Drain line to be 1/2" PVC from back of unit to chase between floors, install trap, continue down inside exterior wall and out to the exterior and the top of the foundation through the brick.
6. The HVAC contractor shall (1) install equipment according to present mechanical codes and manufacturer's installation instructions, (2) properly air seal the home's penetrations where they are penetrated through the exterior walls and (3) properly vacuum lines to 50-100 microns, wait 10 minute to verify no leaks, take a picture for verification on each unit prior to releasing the pre-charge from the units.
7. Electrical Contractor to provide a non fusible disconnect for each exterior unit equal to or better than Lowe's Item # 95578 Model # DPU222RP Eaton 60-Amp Non-Fusible Metallic Disconnect.

HVAC Estimate Pipe Length used for estimating. All lengths are +/- 10%	Length .5" Drain Line (ft)	Length 3/8" Supply Line (ft)	Length 1/4" Return Line (ft)
Kitchen HVAC	20	46	46
Conference HVAC	20	32	32
Office 1 HVAC	20	22	22
Office 2 HVAC	20	22	22
Garage Right HVAC	10	10	10
Garage Left HVAC	10	10	10

REVISION TABLE

NUMBER	DATE	REVISION BY	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

2nd Floor Mech

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE: 1/18/2021

SCALE: 1/2" = 1'

SHEET: MEP-2



Panasonic

WhisperComfort Spot ERV

FV-04VE1 Two 4" Ducts

Panasonic WhisperComfort Spot Energy Recovery Ventilator (ERV) offers a revolutionary way to provide balanced ventilation. Affordable and easy to install, WhisperComfort is energy efficient and provides fresh ventilated air while maintaining Indoor Air Quality (IAQ).

- Spot balanced ventilation
- Low-rate continuous run ideal for multi-family dwellings
- Ideal for new air tight homes built to meet energy efficiency standards
- UL listed for ceiling or wall mount installation
- Exchange capillary core recovers heat, energy and moisture
- Balances air pressure inside the house

WhisperComfort™ Ventilation Fans

WhisperComfort Spot ERV

FEATURES

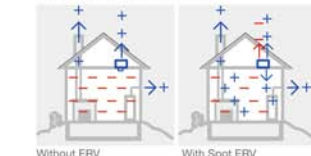
Balanced Ventilation

Tightly built homes and buildings utilizing exhaust only fans can create negative pressure. WhisperComfort solves this by supplying air to replace exhausted air, helping to balance air pressure within the home.

Panasonic's WhisperComfort Spot ERV uses two 4 inch ducts - one to exhaust stale air and the other to supply fresh air from outdoors. Its low, continuous run ensures volatile organic compounds (VOCs) are vented out and replaced with fresh air.

WhisperComfort does not require connection to the Central HVAC or the addition of a condensation line. This "Spot" ERV feature allows it to be installed in many places throughout the home to meet comfort, health and IAQ needs.

Tight Home Air Pressure



Exchange Capillary Core

Indoor and outdoor air passes through Panasonic's patented capillary core technology designed to transfer heat energy and moisture. The process transfers supply air while transferring moisture.

Motor Technology

Panasonic uses a single AC condenser motor to run two highly efficient blower wheels. The motor is totally enclosed to ensure long-life and continuous quiet operation.

Filters

Two filter clean exhaust and supply air before passing through the ERV core, extending the life of the core.

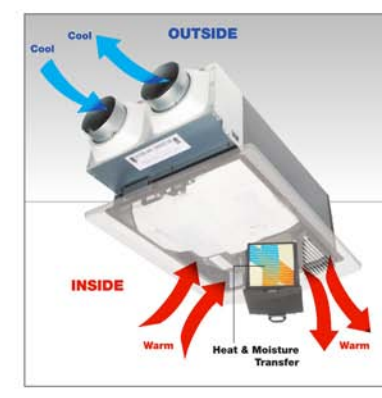
Grille Design

The contemporary, low profile grille design incorporates spring clips for easy removal.

Spot ERV

WhisperComfort is a ceiling or wall-mount Energy Recovery Ventilator (ERV) ideal for a single large, open space room or for multi-story homes' hallways. Two or even three WhisperComfort ERVs may be installed, often at a cost lower than a traditional

Spot ERV Technology



whole building ERV that requires connecting to the Central HVAC System.

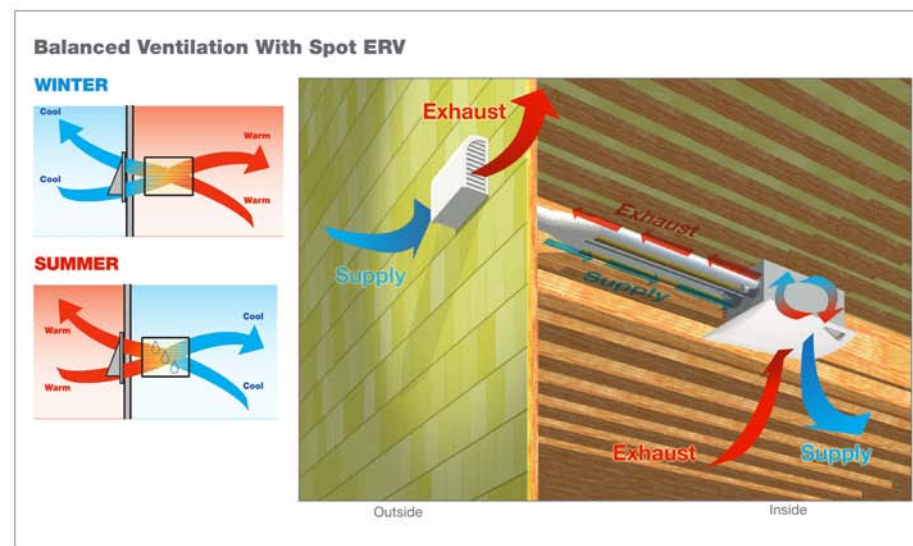
Ideal for: Home Office / Game Rooms / Family Rooms / Bonus Rooms
This is an affordable way to add ERV to a specific room or a new addition.

Whole House ERV

WhisperComfort is also suitable to meet whole house ventilation requirements under ASHRAE 62.2. WhisperComfort is an ideal choice when partnered with mini-split or VRF Heat Pumps for fresh, balanced air with energy recovery which makes it a very affordable, cost-effective IAQ solution. The sizing charts on the next page provide a guideline for number of bedrooms and square feet. Additionally, two or even three WhisperComfort ERVs may be installed, often at a cost lower than a traditional whole house ERV.

ASHRAE 62.2 2010 Standard

The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) set a standard for whole house ventilation, requiring the continuous mechanical ventilation be 7.5 CFM per bedroom (master bedroom X 2) plus 1 CFM per 100 square feet, with some not to exceed 1.0. ASHRAE 62.2-2013 requires a ventilation rate of 7.5 CFM per person plus 0.7 CFM per 100 square feet. Please check with your local code to determine which ventilation standard you should follow. Panasonic WhisperComfort ERV is an affordable, efficient way to meet the ASHRAE 62.2 standard.



OPERATION

Settings

WhisperComfort has two 2-speed CFM settings:

- High: 30 CFM / 10 CFM
- Low: 40 CFM / 20 CFM factory preset

The factory setting is 40/20 CFM. To change to optional 20/10 CFM settings, move the plug connector located in the plug connector box to the 20 CFM side of the receptacle. This step must be completed prior to installation.

Switches

WhisperComfort operates in an on/off and high/low mode. When the switch is turned off, the unit does not operate. When the switch is turned on, the unit will operate at the high or low mode. A duplex switch, designed for a single gang box, may be selected for switch operation. Switch labels are provided for convenience to attach to the selected switches.

Panasonic offers the FV-WC2011-W/W/WH/Remotes 2 function switch as part of the WhisperComfort product line. This commercial grade on/off multi-switch can be used with the ERV. Includes a designer wall plate and carries a 2-year limited warranty. This switch is sold separately.

Filters

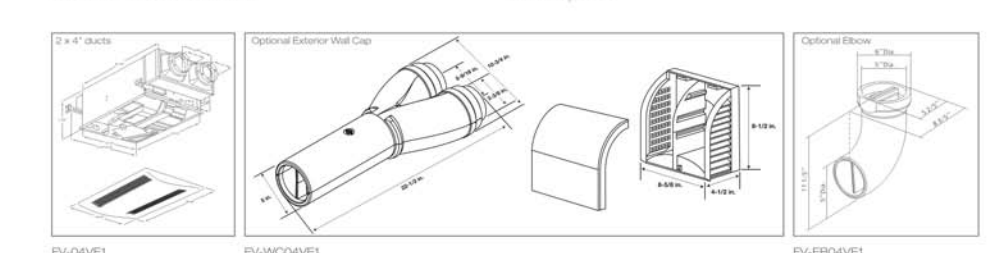
WhisperComfort has two air filters. One filter is located on the inside lower of the grille. The second filter is located in the unit held by a bracket with a handle. Pull the handle to remove the filter bracket and remove the filter from the bracket. Both filters should be vacuumed with a soft brush attachment.

PRODUCT

- Rust proof paint treatment on galvanized housing
- Thermal fuse protection
- Meets Washington State Ventilation and Indoor Air Quality code and ASHRAE 62.2 - 2010
- 3 Year Warranty

Specifications	FV-04VE1		
	40 CFM	20 CFM	10 CFM
Static pressure (inches w.g.)	0.1	0.1	0.1
Air Volume Exhaust (CFM)	40	20	10
Air Volume Supply (CFM)	30	20	10
Noise (sones)	0.8	<0.5	N/A
Power Consumption (Watts)	28	21	17
Speed	1470	1280	1080
Current	0.13	0.10	0.08
Power Rating (W/h)	3.96	2.52	1.82
Motor Type	Condenser		
Type of Motor Bearing	Ball		
Blower Wheel Type	2 Blade		
Thermal Fuse Protection	Yes		
Apparent Sound Power (dB)	58		
Blower Wheel Type	2 Blade		
Heating (H) 32°F (0°C)	90% at 20 CFM		
Cooling (C) 95°F (35°C)	30% at 20 CFM		

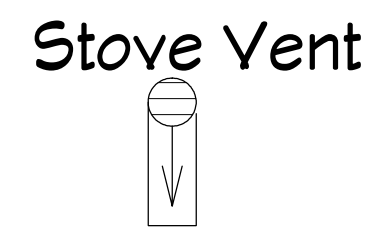
Note: CFM and noise are tested and certified in accordance with AHJ testing standards. Energy efficiency is tested in accordance with CSA-C645 standard.



FV-04VE1 FV-WC2011 FV-EVB04VE1

Panasonic Eco Solutions of North America
Eco Products Division
Two Riverfront Plaza
Newark, NJ 07102
www.panasonic.com/ventfans
For Order Information
PHONE: 866-262-7299
FAX: 908-553-0228
ventfans@panasonic.com

Bathroom Vent
Panasonic (FY-0510VSL1)
Whisper Fan/Light



Panasonic FV-04VE1 WhisperComfort™
Spot ERV Ceiling Insert Ventilator with
Balanced Ventilation

Attic

SIZING

Spot Ventilation

Ventilation Capacity Requirements	1 Bedroom	2 Bedrooms	3 Bedrooms
10 CFM Single Bedroom	10 CFM	15 CFM	20 CFM
20 CFM Master Bedroom	20 CFM	30 CFM	40 CFM

Need to choose 10/20 CFM mode when installing.

Sizing example 1 (based on ASHRAE 62.2):

TWO BEDROOMS at 1600 SQ. FT.
Master Bedroom (7.5 CFM x 2) = 15 CFM
Second Bedroom = 7.5 CFM
1600 SQ. FT. x .01 = 16 CFM
Total = 38.5 CFM
Use WhisperComfort set at 40 CFM.

Whole House Ventilation (IAQ)

ASHRAE 62.2 2010	1 Bedroom	2 Bedrooms	3 Bedrooms
20 CFM	500 sq. ft.	N/A	N/A
40 CFM	2500 sq. ft.	1750 sq. ft.	1000 sq. ft.

Need to choose 20/40 CFM mode when installing.

Sizing example 2 (based on ASHRAE 62.2):

FOUR BEDROOMS at 2200 SQ. FT.
Master Bedroom (7.5 CFM x 2) = 15 CFM
Other 3 Bedrooms (7.5 CFM each) = 22.5 CFM
2200 SQ. FT. x .01 = 22 CFM
Total = 60.5 CFM
Use 2 WhisperComfort or 1 WhisperComfort and 1 WhisperComfort.

INSTALLATION

Mounting
WhisperComfort is UL listed for ceiling or wall mount installation. It measures 14" wide and fits between joists 16" on center. Adjustable brackets and screws are provided to secure the unit to the joist on 4 corners.

Wiring
Power consumption is 23 Watts at 40 CFM with a power rating of 120/0 V/60 Hz. Bring house power to the unit junction box and use 3 wires to connect the 3 wires.

Duct
Insulated 4" duct is recommended. For cold climates, this will help avoid condensation build up. And for warm climates, this will help reduce heat transfer to supply air.

OPTIONAL ACCESSORIES

Exterior Wall Cap

Unless previous installations where two wall caps were required, WhisperComfort's FV-WC04VE1 polypropylene wall cap accessory with stainless adaptor conveniently allows both exhaust from the right and supply from the left airflow through a 5.2" x 5.75" hole in the building envelope. The divider inside the bottom portion of the adaptor is a clear chamber and the 3-in wall cap help prevent cross contamination.

To achieve optimum performance and air flow minimum, allow a 2-3 inch clearance from the bottom of the cap to the floor. Connect the ERV unit directly to the 3" shaped adaptor of the exterior wall cap, you can save the step.

Typical Wall Cap Installation

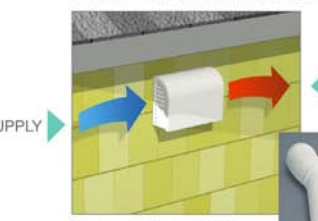


Alternative Panasonic Solution

Whisper Comfort's FVEVB04VE1 styrofoam elbow accessory connects to the 1" shaped adaptor of the exterior wall cap to help simplify wall installation. The elbow also features double chambers for exhaust and supply air to help prevent cross contamination.

Whisper Comfort's FVEVB04VE1 styrofoam elbow accessory connects to the 1" shaped adaptor of the exterior wall cap to help simplify wall installation. The elbow also features double chambers for exhaust and supply air to help prevent cross contamination.

Optional Exterior Wall Cap - Model # FV-WC04VE1



MAINTENANCE (Cleaning)

Maintenance instructions can be found in the Operating Manual.

Grille

Follow the Operating Manual to remove the grille from the unit. Next, remove the filter from the inside cover of the grille. Never use gasoline, benzene, thinner or any other chemicals when cleaning the grille or ERV unit. Do not wear grille in a dishwasher which may cause it to deform. Instead, use light dish soap.

Exchange Capillary Core

Whisper Comfort's exchange core is made from a paper-like material and should never be washed or submerged in water. To clean, vacuum with a soft brush attachment. To clean, use vacuum suction with a soft brush attachment. Do not use a vacuum to blow air through the ERV core as that may damage the core.

REVISION TABLE	
NUMBER	DATE

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Outside Air Exchange

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

1/2" = 1'

SHEET:

MEP-4

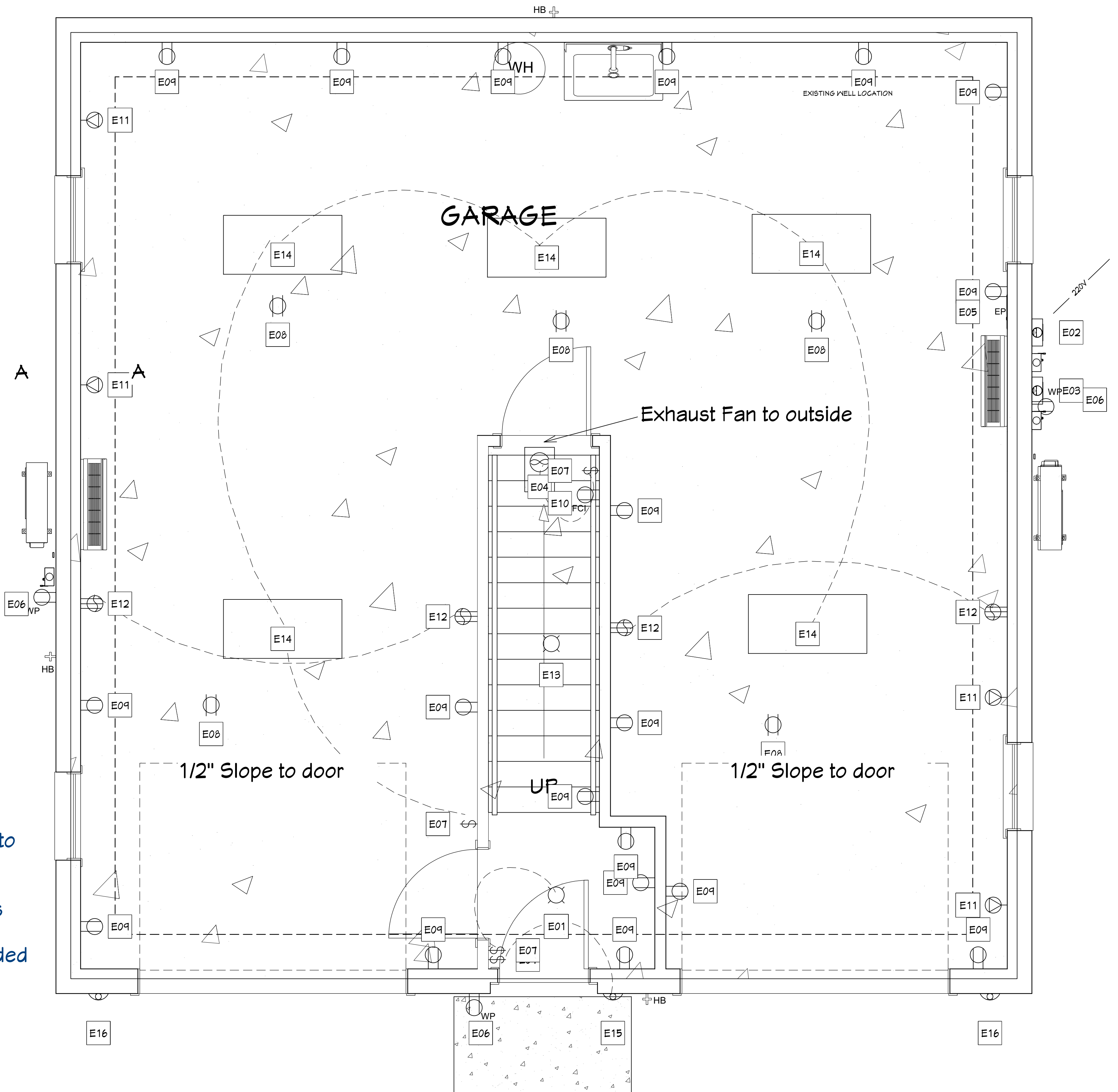
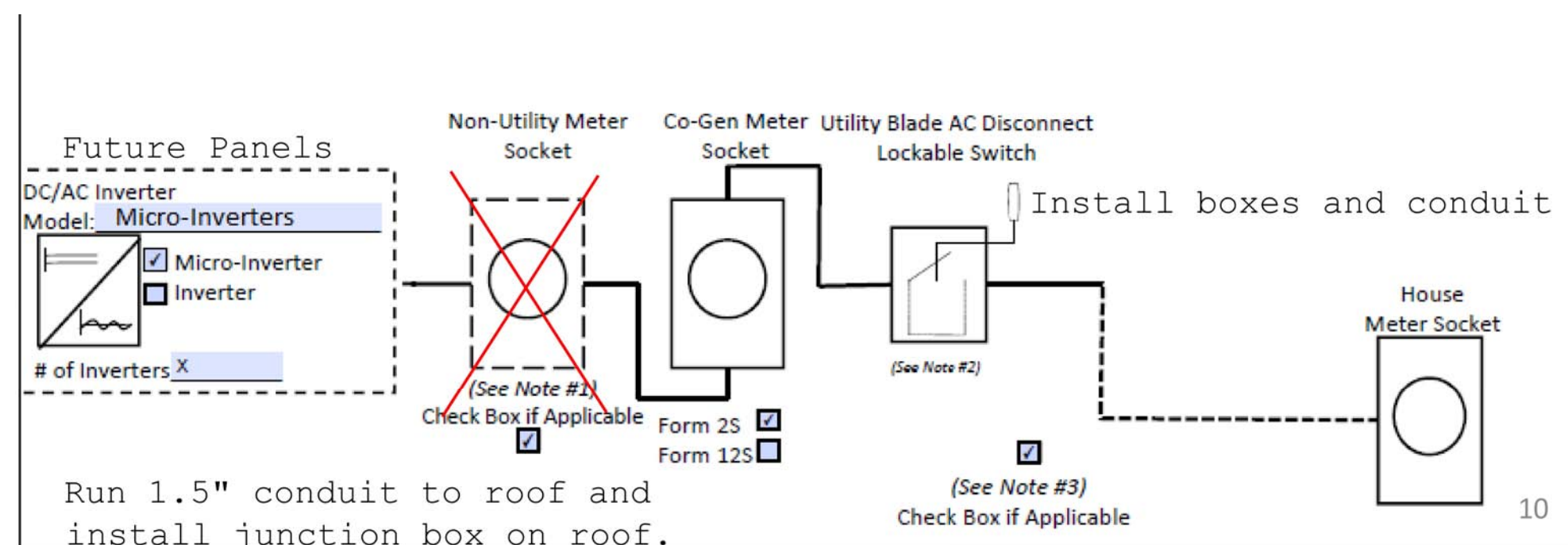
Electrical Panel Schedule

No.	Name	AMP	No.	Name	AMP
1	Right Kitchen outlets GFCI/AFCI	20	21	Garage Bathroom GFCI/ AFCI	20
2	Left Kitchen outlets GFCI/ AFCI	20	22	Garage Water Heater	30
3	Kitchen Electric Range	30	23	Garage Right NEMA 14-50	80
4		30	24		80
5	Kitchen Dishwasher	15	25	Garage Left NEMA 14-50	80
6	Kitchen Garbage Disposal	15	26	Garage Left NEMA 14-50	80
7	Kitchen Refrigerator	20	27		80
8	Kitchen Microwave	20	28	Left 3 HVAC	50
9	2nd Flr Bathroom GFCI/ AFCI	20	29		50
10	Office 1 GFCI/ AFCI	20	30	Right 3 HVAC	50
11	Office 2 GFCI/ AFCI	20	31		50
12	Storage Outlets Light GFCI/ AFCI	20	32	Spare	
13	Conference Outlets/Lighting GFCI/ AFCI	20	33	Spare	
14	Stairs / Vestible / Frnt Light/Ext Lights	15	34	Spare	
15		30	35	Spare	
16	Storage Dryer	30	36	Spare	
17	Garage Frnt Outlets GFCI/ AFCI	20	37	Spare	
18	Garage Rear outlets GFCI/ AFCI	20	38	Spare	
19	Spare		39	Spare	
20	Spare		40	Spare	

NUMBER	QTY	FLOOR	ATTACHED TO	DESCRIPTION	COMMENTS	NUMBER
E01	1	1	CEILING	TRADITIONAL FLUSH DOME		E01
E02	1	1	WALL	ELECTRICAL METER SOCKET		E02
E03	1	1	WALL	ELECTRICAL METER SOCKET	SOLAR METER (FUTURE CONNECTION)	E03
E04	1	1	CEILING	EXHAUST (LIGHT)		E04
E05	1	1	WALL	ELECTRICAL PANEL		E05
E06	3	1	WALL	DUPLEX (WEATHERPROOF)		E06
E07	4	1	WALL	SINGLE POLE		E07
E08	5	1	CEILING	DUPLEX, CEILING MOUNTED		E08
E09	19	1	WALL	DUPLEX		E09
E10	1	1	WALL	GFCI		E10
E11	4	1	WALL	HARD WIRED		E11
E12	4	1	WALL	THREE PHASE		E12
E13	1	1	CEILING	BARE BULB		E13
E14	5	1	CEILING	MEDIUM DOUBLE SURFACE MOUNTED TUBE LIGHT [48X21D]		E14
E15	1	1	WALL	WALL GLOBE		E15
E16	2	1	WALL	BOX SCONCE VERTICAL		E16
E17	8	1	WALL	CAT6		E17
E18	2	1	CEILING	CO/SMOKE DETECTOR		E18

Electric Notes:

- Minimum wire size to be 12 gauge copper wire.
- NEMA 14-50 outlets to be wired with #4 copper wire for Electric car charging.
- 28-31 HVAC circuits from breaker to #1 disconnect use #6 copper wire, from disconnect #1 to disconnect #2 use #8 copper wire them from disconnect #2 to disconnect #3 use #10 copper wire. Optional use #6 copper wire for all connections to disconnects.
- All exterior outlets to be installed with exterior outlet covers.
- Power to be supplied from Dominican Electric. Underground power transformer is less than 25' from the power meter location.
- Exterior boxes to be wired for solar installation in the future. Conduits to be provided with pull strings for future use. Run 1.5" conduit from roof with 180deg cap down to solar meter base. Place cap or plug conduit to keep clean.



1st Floor

REVISION TABLE	NUMBER	DATE	REVISOR	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

1st Floor Electrical

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

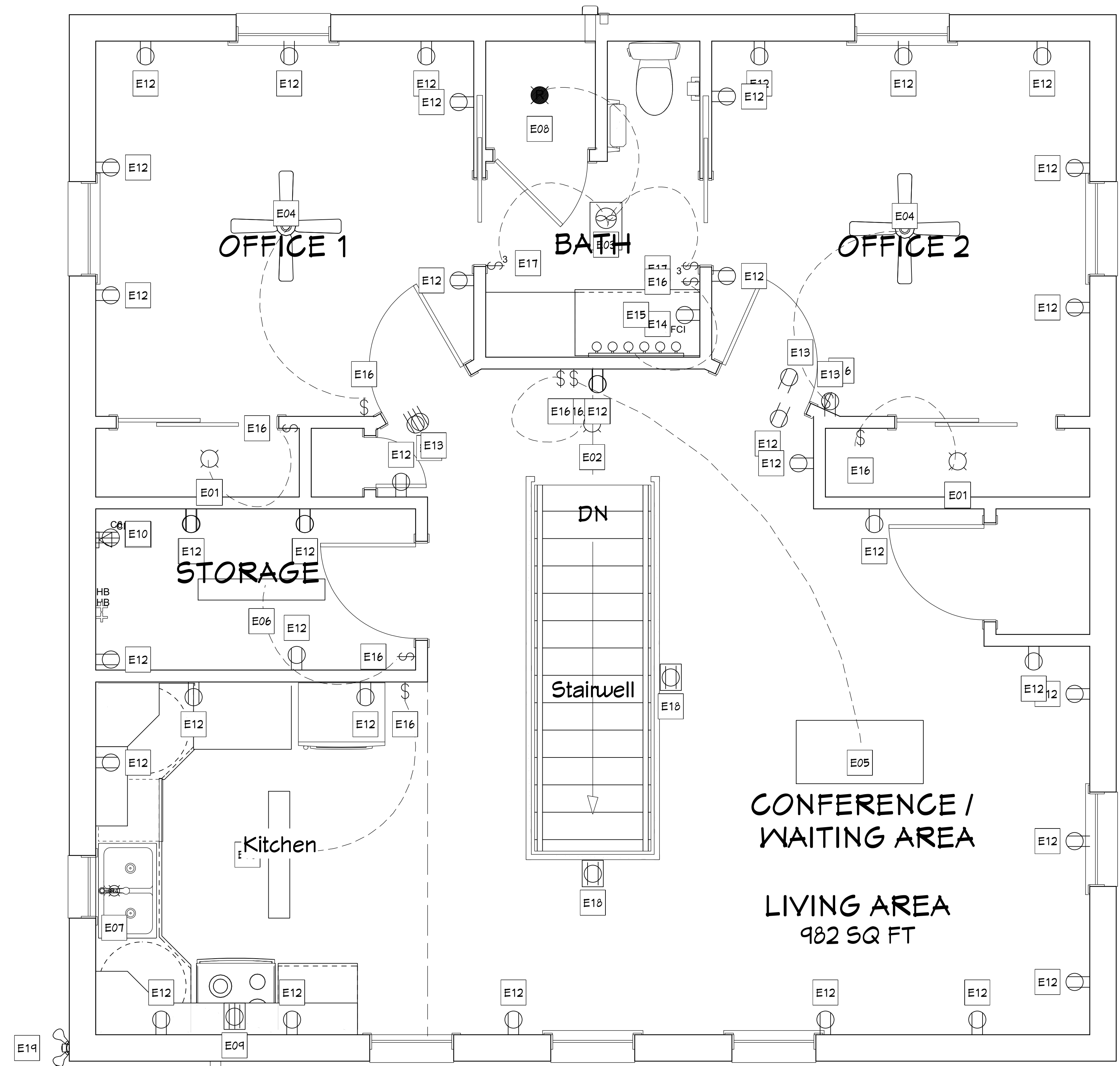
1/2" = 1'

SHEET:

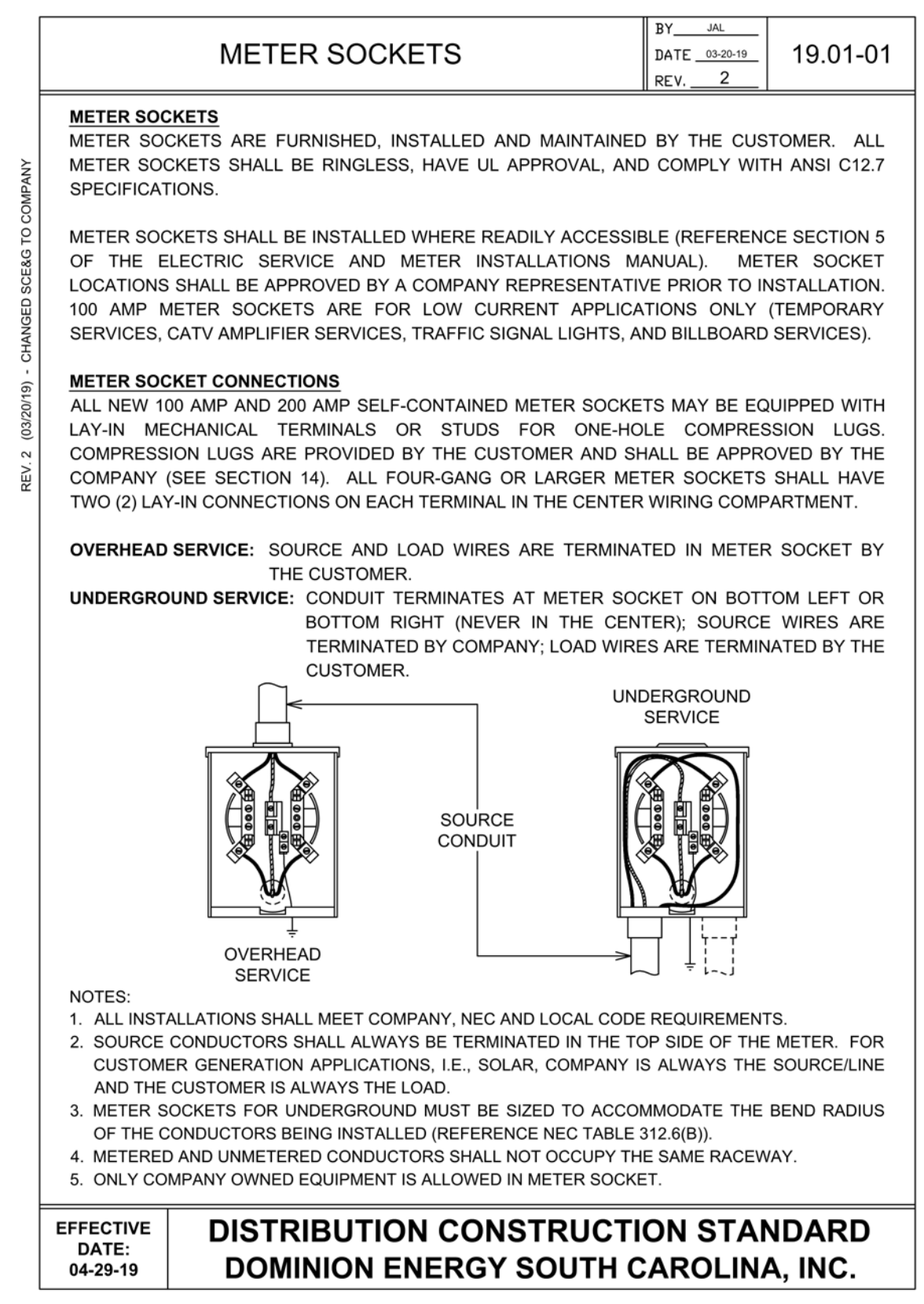
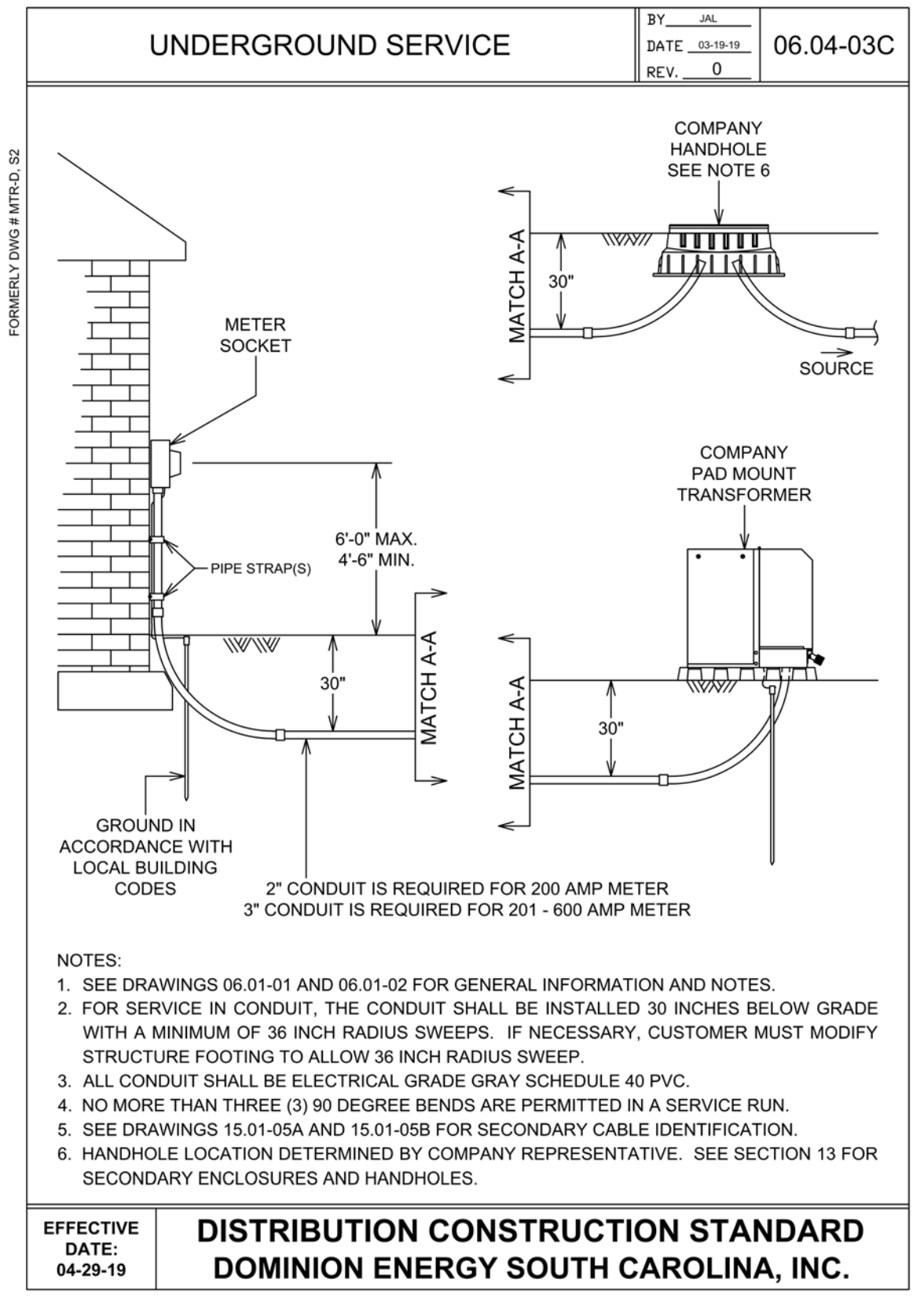
MEP-5

Electrical Panel Schedule

No.	Name	AMP	No.	Name	AMP
1	Right Kitchen outlets GFCI/AFCI	20	21	Garage Bathroom GFCI/ AFCI	20
2	Left Kitchen outlets GFCI/ AFCI	20	22	Garage Water Heater	30
3	Kitchen Electric Range	30	23	Garage Right NEMA 14-50	80
4		30	24		80
5	Kitchen Dishwasher	15	25	Garage Left NEMA 14-50	80
6	Kitchen Garbage Disposal	15	26		80
7	Kitchen Refrigerator	20	27	Left 3 HVAC	50
8	Kitchen Microwave	20	28		50
9	2nd Flr Bathroom GFCI/ AFCI	20	29	Right 3 HVAC	50
10	Office 1 GFCI/ AFCI	20	30		50
11	Office 2 GFCI/ AFCI	20	31	Spare	50
12	Storage Outlets Light GFCI/ AFCI	20	32		
13	Conference Outlets/Lighting GFCI/ AFCI	20	33	Spare	
14	Stairs / Vestible / Frnt Light/Ext Lights	15	34	Spare	
15	Storage Dryer	30	35	Spare	
16		30	36	Spare	
17	Garage Frnt Outlets GFCI/ AFCI	20	37	Spare	
18	Garage Rear outlets GFCI/ AFCI	20	38	Spare	
19	Spare		39	Spare	
20	Spare		40	Spare	



2nd Floor



REVISION TABLE

NUMBER	DATE	REVISOR	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

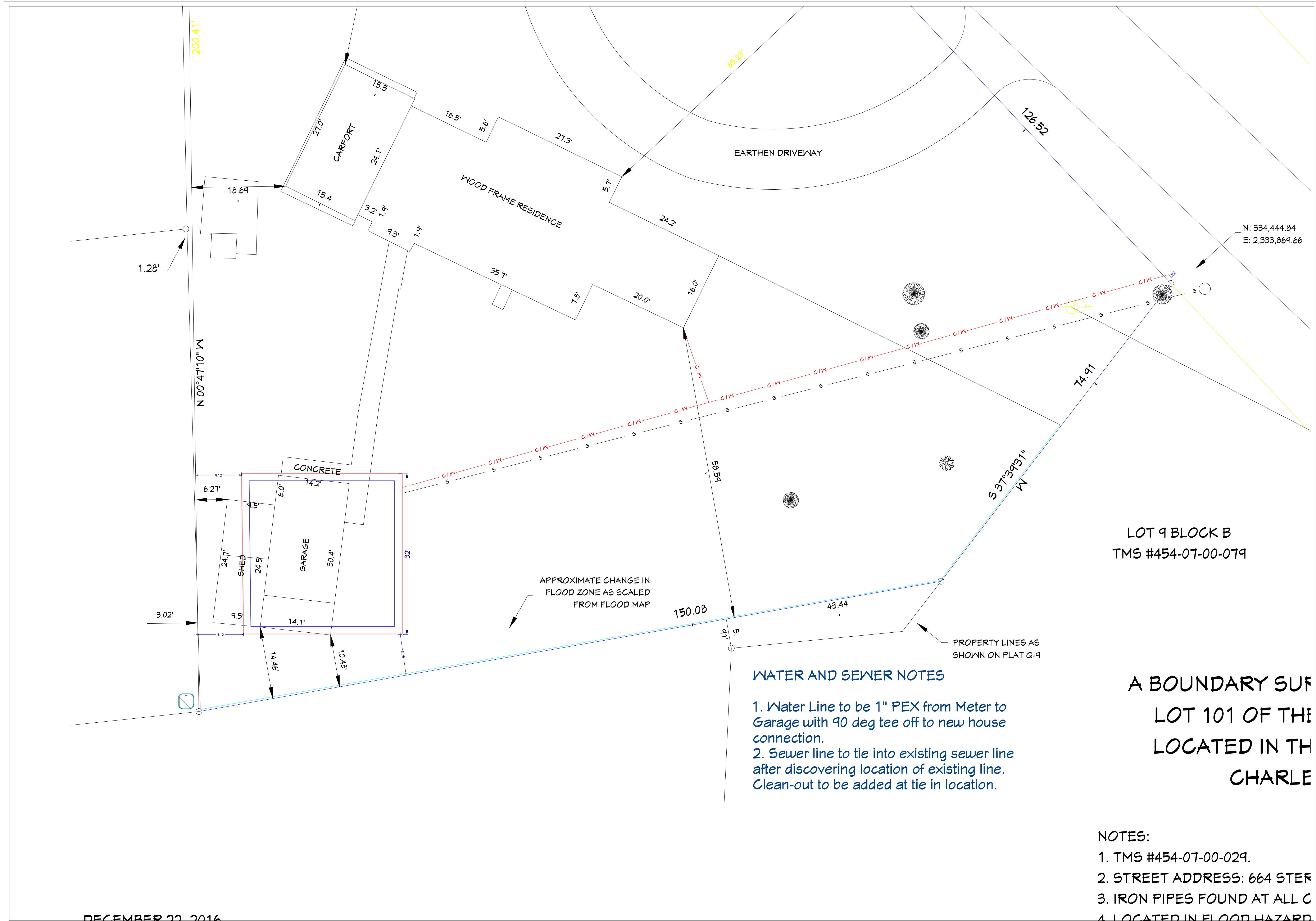
2nd Floor Electrical

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:
1/18/2021

SCALE:
1/2" = 1'

SHEET:
MEP-6



N: 334,444.84
E: 2,333,869.66

APPROXIMATE CHANGE IN FLOOD ZONE AS SCALED FROM FLOOD MAP

PROPERTY LINES AS SHOWN ON FLAT Q-1

WATER AND SEWER NOTES

1. Water Line to be 1" PEX from Meter to Garage with 90 deg tee off to new house connection.
2. Sewer line to tie into existing sewer line after discovering location of existing line. Clean-out to be added at tie in location.

**A BOUNDARY SURVEY
LOT 101 OF THE
LOCATED IN THE
CHARLE**

- NOTES:**
1. TMS #454-07-00-029.
 2. STREET ADDRESS: 664 STERLING DRIVE
 3. IRON PIPES FOUND AT ALL CONNECTIONS
 4. LOCATED IN FLOOD HAZARD ZONE

REVISION TABLE	NUMBER	DATE	REVISOR	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

Site Plumbing Layout

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

DATE:

1/18/2021

SCALE:

SHEET:

MEP-7

Plumbing Notes:

1. All pumbing to be 1/2" and 3/4" PEX pipe. Cold water shall be blue, hot water red.
2. All connections to be SS barbed connectors with copper compression rings.
3. All pex lines to be run in the 14" chase between the garage ceiling and the 2nd floor.
3. Main line from supply coming in through slab to have cutoff valve installed in garage. Piping then reduced down to 3/4" ran directly to the hot water heater. All water connections off the 3/4" PEX shall be 3/4x3/4x1/2 tees to installed fixtures using 1/2" PEX.
4. Hot water from the water heater to be 3/4" from HW heater to kitchen sink. All hot water connections off the 3/4" PEX shall be 3/4x3/4x1/2 tees to installed fixtures using 1/2" PEX.
5. All fixtures to include a shutoff valve on both hot and cold water.



PERFORMANCE PLATINUM™ Hybrid Electric is the most efficient water heater available

- Efficiency**
 - High 3.55 - 3.70 UEF reduces operating cost
 - ENERGY STAR® rated
- Performance**
 - Delivers hot water faster than most standard electric water heaters - 67 gallons first-hour delivery for 50-gallon model, 75 gallons FHD for 65-gallon model and 89 gallons FHD for 80-gallon model
 - Ambient operating range: 37-145° F is widest in class, offering more days of HP operation annually, designed to meet Northern Climate Spec (Tier 3)
- Easy Installation**
 - Easy access side connections
 - Quick access to electrical junction box
 - Easily replaces a standard electric water heater
- Integration**
 - LCD Screen with built-in water sensor alert with audible alarm



PERFORMANCE PLATINUM Hybrid
50, 65 and 80-Gallon Capacities
208-240 Volt / 1 PH Electric

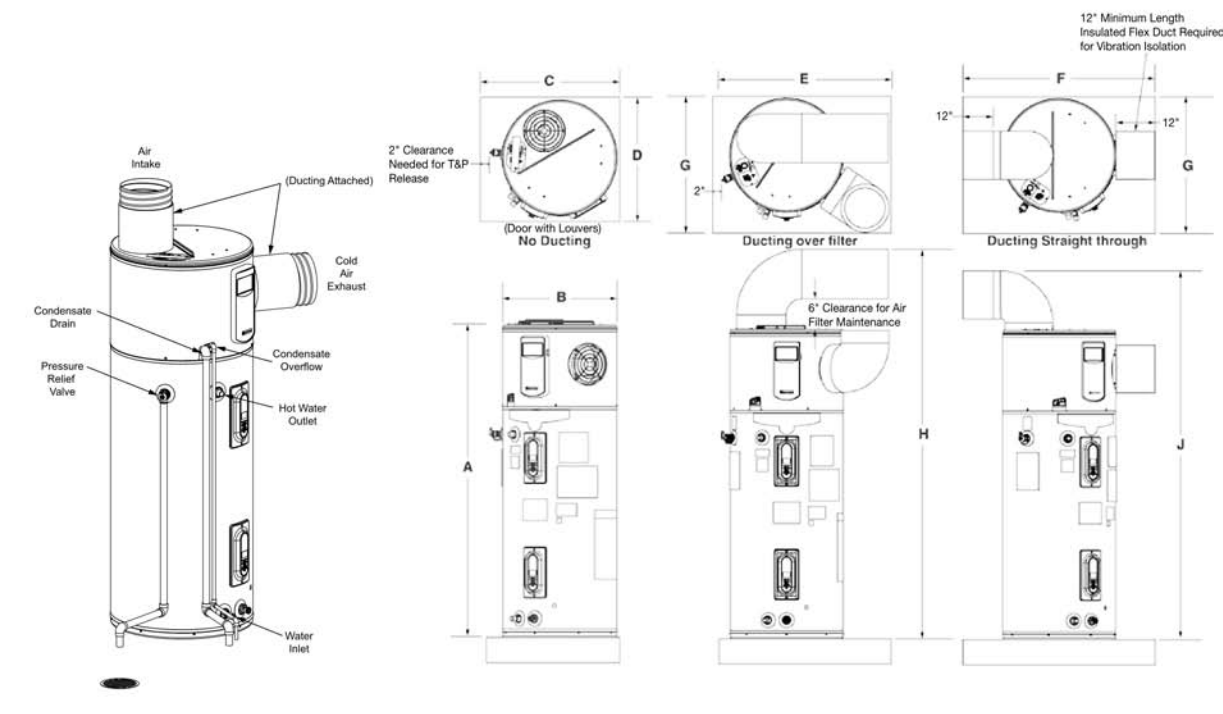


- Control Settings**
 - Energy Saver
 - Heat Pump
 - High Demand
 - Electric
- Plus...**
 - Vacation: 2-28 days (or placed on hold indefinitely)
 - Premium grade anode rod with resistor extends the life of the tank
 - 3/4" NPT water inlet and outlet; 3/4" condensate drain connections
 - Incoloy stainless steel resistor elements
 - Dry-film protection
 - Easy access, top mounted washable air filter
 - 2" Non-CFC foam insulation
 - Enhanced flow brass drain valve
 - Temperature and pressure relief valve installed
 - Low lead compliant
- Warranty**
 - 10-Year limited warranty for tank and parts; 1-year full in-home labor warranty
 - See Resistor Warranty Certificate for complete information

See specifications chart on back.

1017 FORM NO. 703

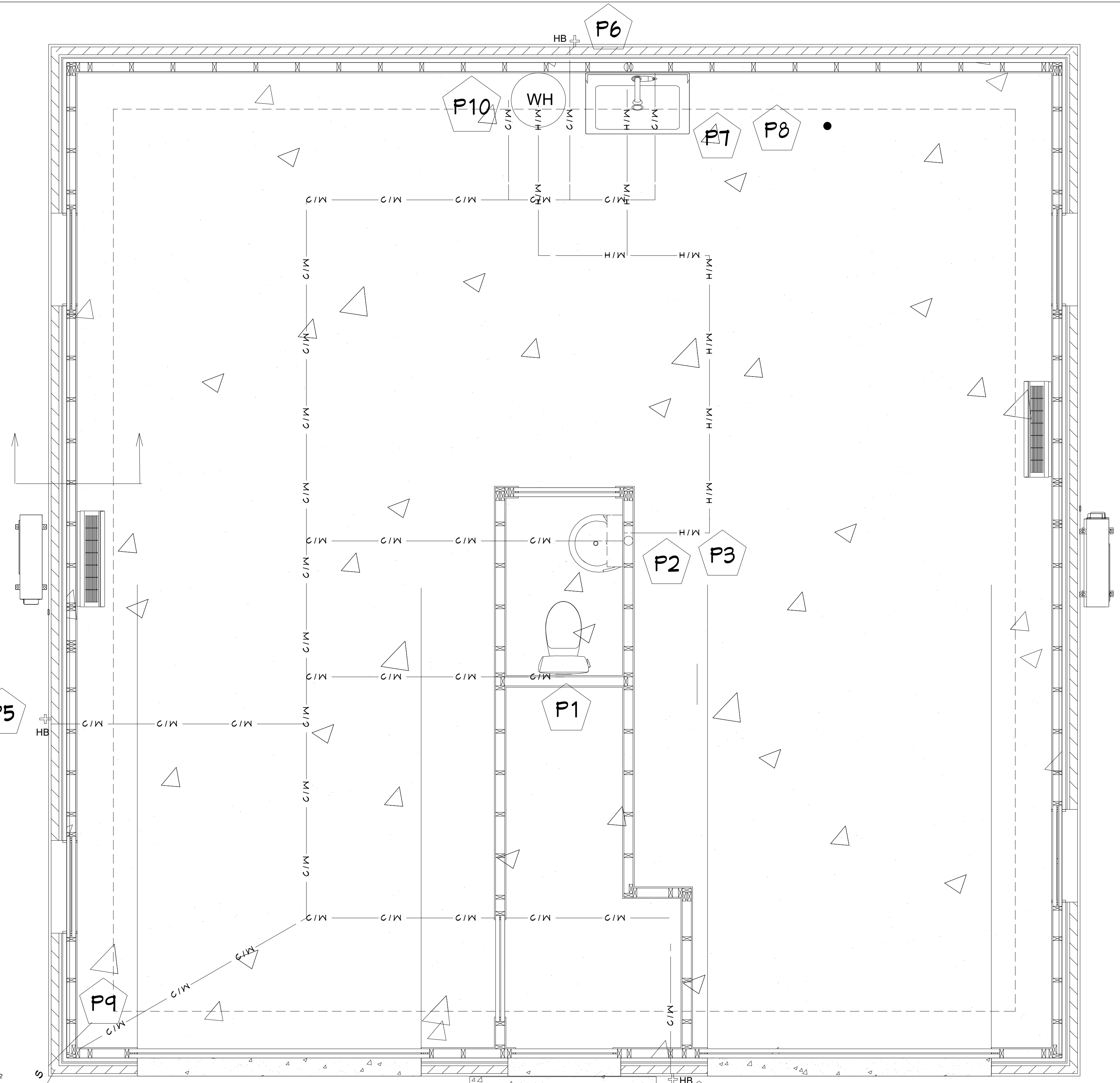
Fuel Type	Model	Rated Gallon Capacity	Rated Gallon Capacity	Model Number	Model Number	Electrical Breaker Size	Estimated Annual Energy Cost	Compressor Btu/h	Sound Level (dB)	First Hour Delivery (GPD)	Recovery Rate (GPD)	Standby Loss (GPD)	Water to Heat (GPD)	Water to Heat (GPD)	Water to Heat (GPD)	Water to Heat (GPD)		
Electric	50	45	45	XB0119H050E1	686074	30	1.55	\$110	4200	49	67	29	61"	24-1/4"	3-5/8"	36-3/8"	179	216
Electric	65	59	59	XB0119H065E1	686010	30	3.70	\$161	4200	49	75	29	64"	24-1/4"	3-5/8"	43-3/8"	225	262
Electric	80	72	72	XB0119H080E1	686008	30	3.70	\$161	4200	49	89	29	74"	24-1/4"	3-5/8"	52-3/8"	244	281



Col. No.	Model Number	A	B	C	D	E	F	G	H	J
61	XB0119H050E1	61	29-1/4	38	24	36	60	37	27	73
65	XB0119H065E1	64	24-1/4	30	26	38	52	29	30	76
80	XB0119H080E1	74	24-1/4	35	26	38	52	29	30	88



The new degree of comfort.



Number	Label	Qty	Floor	Cold Water	Hot Water	CutOff Valve	Item Description Or Product ID - Substitutions Accepted if same or better (and Approved)
P1	ADA Toilet	1	1	yes	no	yes	TBD
P2	Pedestal Sink 05	1	1	NA	NA	NA	TBD
P3	Pedestal Sink Faucet	1	1	yes	yes	yes	TBD
P4	Hose Bibb	1	1	yes	no	no	Outside Left, Aquor HH012B Frost-Free House Hydrant, 12 inch, Aquor Blue
P5	Hose Bibb	1	1	yes	no	no	Outside Front, Aquor HH012B Frost-Free House Hydrant, 12 inch, Aquor Blue
P6	Hose Bibb	1	1	yes	no	no	Outside Rear, Aquor HH012B Frost-Free House Hydrant, 12 inch, Aquor Blue
P7	Single Basin Laundry Sink	1	1	NA	NA	NA	Item # 177328 Model # 27F Mustee 40-in x 24-in 2-Basin White Freestanding Polypropylene Utility Sink with Drain
P8	Single Basin Laundry Faucet	1	1	yes	yes	yes	TBD
P9	1/2" Cold Water Inlet Valve	1	1	yes	no	yes	Structure Water Inlet, Brass 1/2-in PEX Ball Valve In wall Box
P10	Water Heater	1	1	yes	no	yes	Item # 816193 Model # HP10-50H45DV A.O. Smith Signature Premier 50-Gallon Tall 10-year Limited 4500-Watt Double Element Electric Water Heater with Hybrid Heat Pump

1" waterline to be PEX-B, approved for NSF/ANSI 62, ASTM F877-2011a and CSA B137.5-2009, Maximum working pressure is 160 PSI at 33° F – 70° F, Connections to be SS barbs with copper compression rings. Waterline to be run to water meter and provide a service loop at the meter of 2' min. Approximately 170lf.

1st Floor

REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

DRAWINGS FOR:
Martin Garage Replacement
664 Sterling Drive
James Island, SC 29412-9136

DRAWINGS PROVIDED BY:
RW Martin
2138 Dorchester Road
N. Charleston, SC 29405-7776
(843) 747-5099

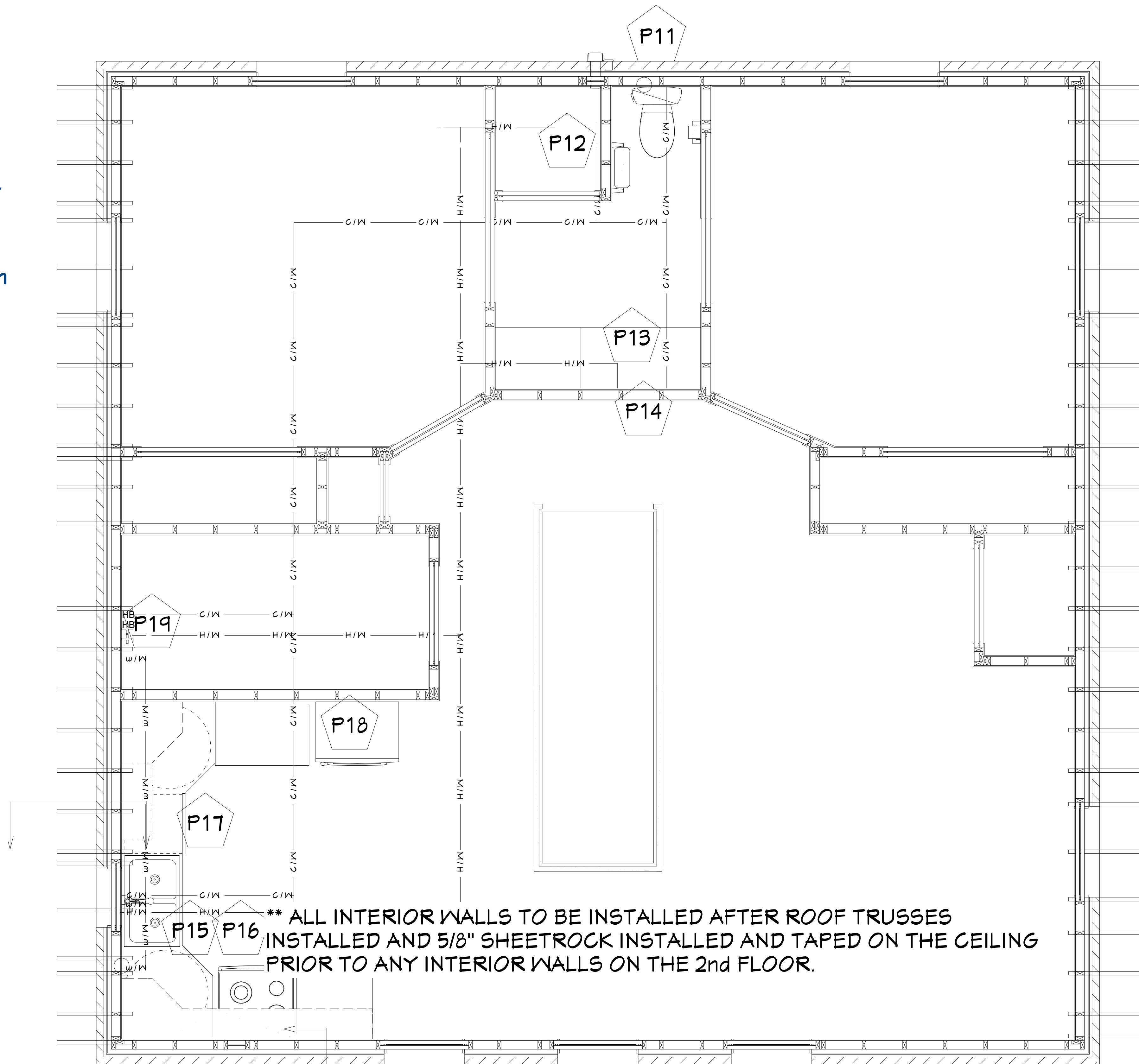
DATE:
1/18/2021

SCALE:
1/2" = 1'

SHEET:
MEP-8

Plumbing Notes:

1. All pumbing to be 1/2" and 3/4" PEX pipe. Cold water shall be blue, hot water red.
2. All connections to be SS barbed connectors with copper compression rings.
3. All pex lines to be run in the 14" chase between the garage ceiling and the 2nd floor.
3. Main line from supply coming in through slab to have cutoff valve installed in garage. Piping then reduced down to 3/4" ran directly to the hot water heater. All water connections off the 3/4" PEX shall be 3/4x3/4x1/2 tees to installed fixtures using 1/2" PEX.
4. Hot water from the water heater to be 3/4" from HW heater to kitchen sink. All hot water connections off the 3/4" PEX shall be 3/4x3/4x1/2 tees to installed fixtures using 1/2" PEX.
5. All fixtures to include a shutoff valve on both hot and cold water.
6. All fixtures are to be selected by the owner. Toilets to be handicapped.



2nd Floor

Number	Label	Qty	Floor	Cold Water	Hot Water	CutOff Valve	Item Description Or Product ID - Substitutions Accepted if same or better (and Approved)
P11	Bathrm ADA Toilet	1	2	yes	no	yes	TBD
P12	Bathrm Shower Unit	1	2	yes	yes	yes	TBD
P13	Bathrm Cabinet/Sink	1	2	NA	NA	NA	TBD
P14	Bathrm Cabinet/Sink Faucet	1	2	yes	yes	yes	TBD
P15	Kitchen Double Sink	1	2	NA	NA	NA	TBD
P16	Kitchen Dble Sink Faucet	1	2	yes	yes	yes	TBD
P17	Kitchen Dishwasher	1	2	no	yes	yes	Connect cut off valve to HW going to Sink
P18	Kitchen Refrigerator Cold Water	1	2	yes	no	yes	Item # 1083800 Model # 25740 SharkBite Quarter Turn Ball Valve PEX Ice Maker Outlet Box
P19	Storage Washing Machine Connections	1	2	yes	yes	no	Item # 354976 Model # 38528 Oatey Quarter Turn Ball Valve PEX Washing Machine Outlet Box

NUMBER	DATE	REVISION	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

2nd Floor Plumbing

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

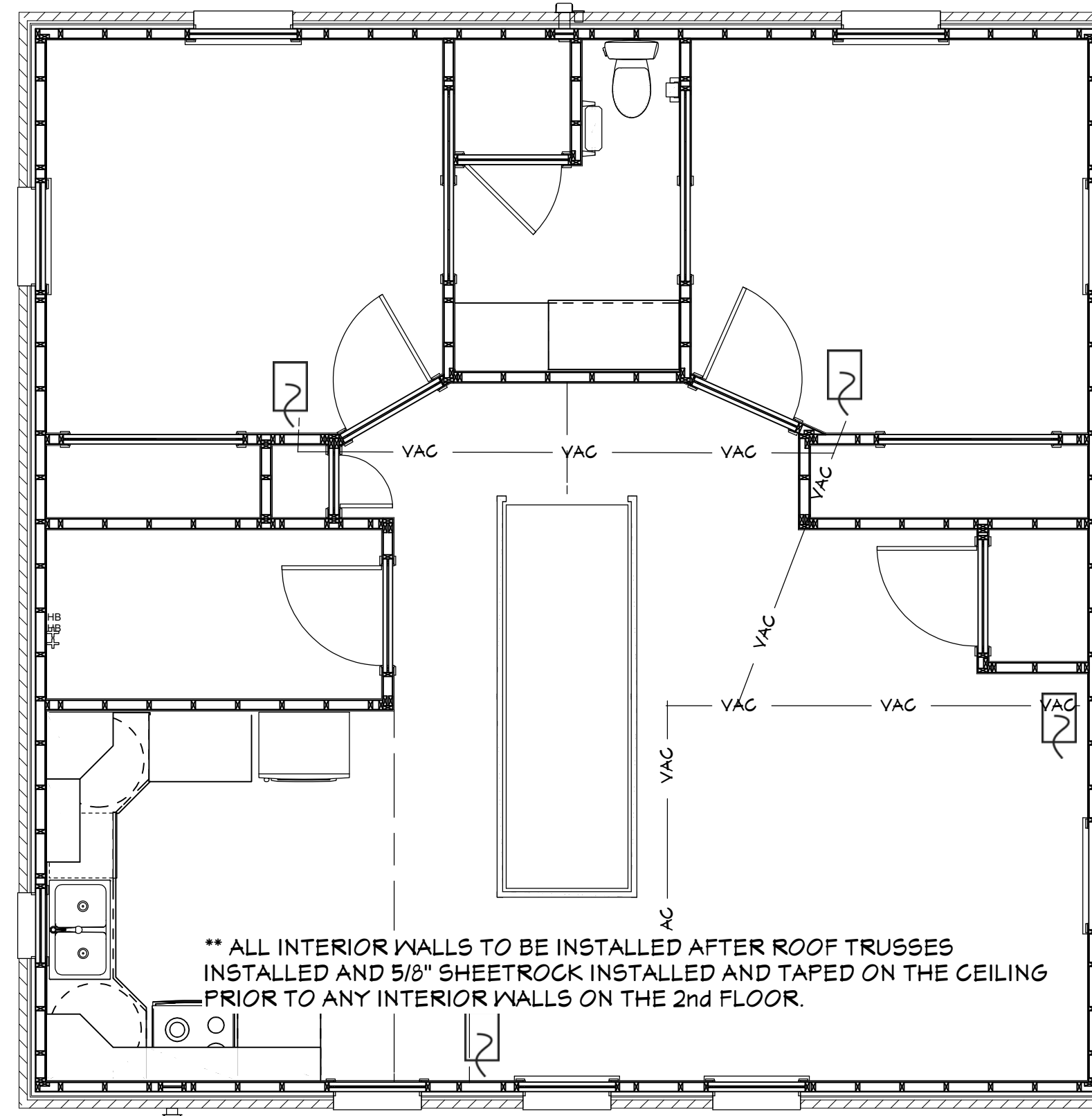
1/18/2021

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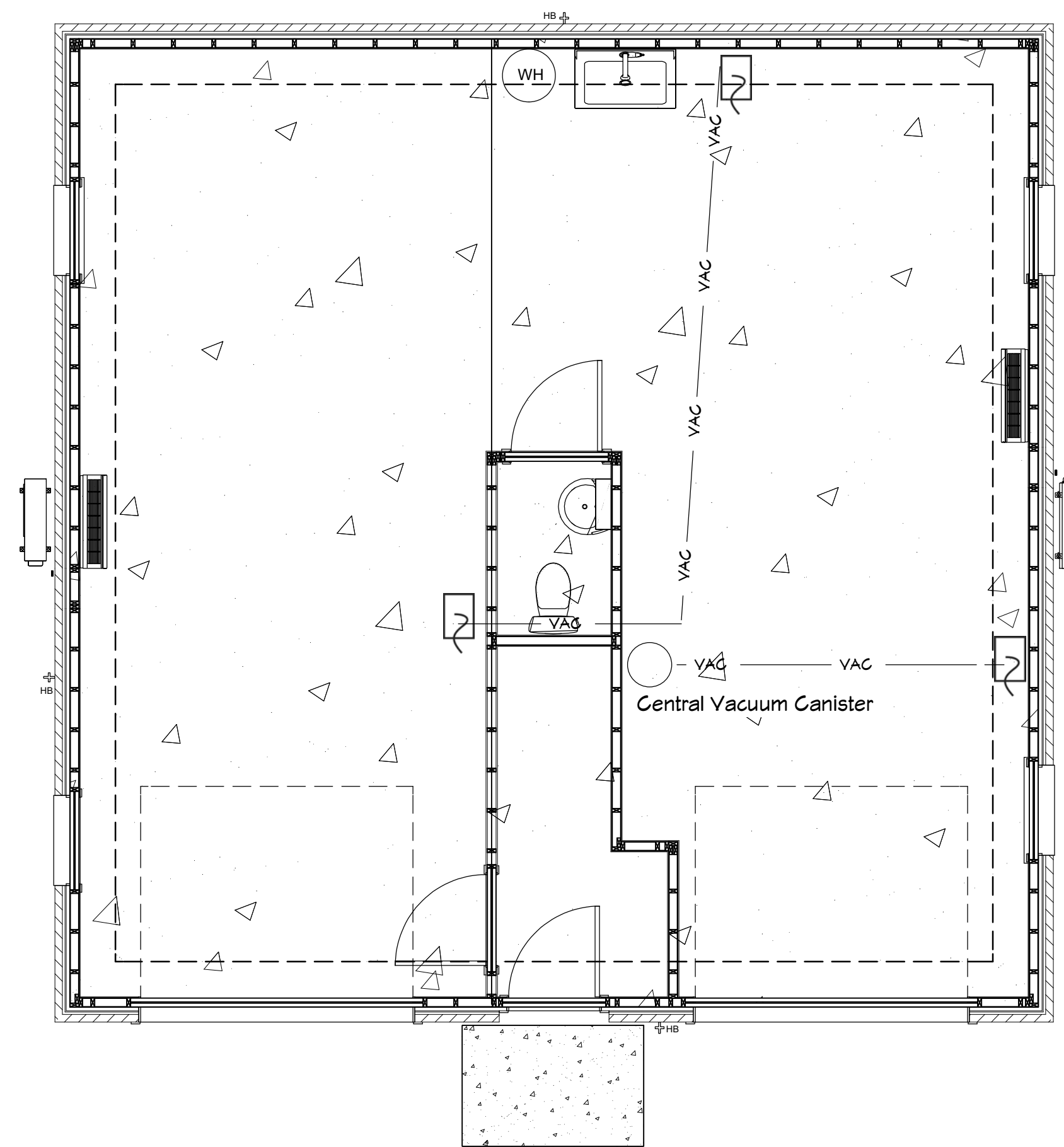
1/2" = 1'

SHEET:

MEP-9



2nd Floor



1st Floor

Central Vacuum Notes

1. Central Vacuum Canister to be mounted in garage on wall as shown. All piping to be install between garage ceiling and Office floor.
2. Garage will have 3 outlets installed
3. Next to the canister mount a hose reel holder to hold the Vacuum hose for storage.
4. Office area to have 4 Vacuum outlets.
5. Vacuum hose for office area to be stored on the back of the storage door.

NUMBER	DATE	REVISION TABLE	REVISOR	DESCRIPTION

DRAWINGS FOR:
 Martin Garage Replacement
 664 Sterling Drive
 James Island, SC 29412-9136

Central Vacuum System

DRAWINGS PROVIDED BY:
 RW Martin
 2138 Dorchester Road
 N. Charleston, SC 29405-7776
 (843) 747-5099

DATE:

1/18/2021

SCALE:

1/4" = 1'

SHEET:

V-1