NOTE TO CONTRACTOR/OWNER

ITS OWNER/CONTRACTOR RESPONSIBILITY TO CALL THE OFFICE AT 409-741-8741 FOR ALL INSPECTIONS

INSPECTION SHEET

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SETE INSPECTION REQUIRED:

- PRE-POUR INSPECTION PRIOR TO PLACING CONCRETE
- FRAMING INSPECTION

CONTACT THE CITY/COUNTY FOR THE REQUIRED CITY/COUNTY INSPECTIONS. THE INSPECTIONS ABOVE DO NOT ELIMINATE ANY INSPECTIONS REQUIRED BY THE CITY/COUNTY.

PROJECT INFORMATION:

APPLICATION NUMBER:	HC-17826
STORIES:	1
PLAN NAME	MAGNOLIA GAR
ELEVATION STYLE:	3
NO. OF BEDROOMS:	3
TUB/SHOWER STYLE: (MASTER/GUEST)	STD/STD
ELEVATION ABOVE ADJACENT GRADE:	SOG

EXISTING UTILITIES INFORMATION:

WATER:	MUNICIPALITY
SEWER:	MUNICIPALITY
GAS:	NAT. GAS ☒ LPG ☐ NO ☐
Gas Clothes Dryer:	YES ☐ NO ☒
ELECTRIC:	Municipality
SEPTIC:	NO
WATER WELL:	NO

SPECIAL NEEDS:

TUB/SHOWER: (HC VANITY REQ'D. W/ HC3 & HC3)	YES ☐ NO ☒
VINYL FLOORING:	YES ☒ NO ☐
DISHWASHER / GARBAGE DISPOSAL:	YES ☒ NO ☐
VISUALLY/HEARING IMPAIRED:	YES ☒ NO ☐
NOISE MIT:	YES ☐ NO ☒
HISTORIC:	YES ☐ NO ☒
FLOODPLAIN:	YES ☐ NO ☒
WIND ZONE:	137 MPH

ADDITIONAL CRITERIA:
2 CAR GARAGE WITH BRICK FACADE

WES BUCHHORN, PE
TIM BUCHHORN, PE

FIRM REGISTRATION #13882

NO.	ISSUE / REVISION	DATE
	ORIGINAL RELEASE	1-18-21
	REVISED	1-27-21

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ENGINEER STAMP AND SIGNATURE

STATE OF TEXAS
WESLEY ALLAN BUCHHORN
108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: TABLE OF CONTENTS

DATE: JAN. 27, 2021

SCALE: NTS

SHEET: I1

DESIGN CONDITIONS:

CITY CODE: IRC 2015 — ENERGY CODE: 2015 IECC (BY OTHERS)
WINDSTORM CODE: N/A
WIND CONDITIONS:
ASCE 7-16-VULT= 137 MPH EXPOSURE C
ASCE 7-10- VULT= 137 MPH EXPOSURE C
ASCE 7-05 - 110 MPH EXPOSURE C
RISK CATEGORY: 2 (FOR WIND LOAD REQUIREMENTS)
DEAD/ LIVE LOADS PER THE IRC 2015, ASCE 7-10
DECK LIVE LOADS: 40 PSF, DL=10 PSF
FLOOR LIVE LOAD: 40 PSF, DL=10 PSF
ROOF LIVE LOAD: 20 PSF, DL=10 PSF
CEILING LIVE LOAD (LIMITED STORAGE) = 20 PSF
CEILING DEAD LOAD = 5 PSF
GUARDRAIL LOAD = 50 LB/FT, 200 LB POINT LOAD
STAIR TREAD DESIGN = LL= 40 PSF OR 300 LB POINT LOAD ANYWHERE, DL=10 PSF

FRAMING LUMBER:

1. STUDS - SYP #2 OR BETTER, UNO - SIZE PER THIS DRAWING PACKET
2. CEILING JOISTS - SYP #2 OR BETTER, UNO
3. RAFTERS - SYP #2 OR BETTER, UNO
4. TOP PLATES - SYP #1 OR BETTER, UNO
5. STRINGERS - TREATED SYP #2 OR BETTER, UNO
6. FLOOR JOISTS - SYP #2 OR BETTER, UNO (TREATED IF WITHIN 30" OF GROUND)
7. SUB-FLOOR - STRUCTURAL 1 OR BETTER, UNO (3/4" MIN. THICKNESS) - TREATED IF WITHIN 30" OF THE GROUND
8. HEADERS - SYP #2 OR BETTER, UNO
9. ALL SILL PLATES ON CONCRETE FOUNDATIONS SHALL BE TREATED. - SYP #2 OR BETTER
10. ALL EXPOSED LUMBER (ENVIRONMENT) OR LUMBER WITHIN 30" FROM THE GROUND SHALL BE PRESSURE TREATED.

PILINGS:

1. ALL PILINGS TO BE SYP #2 OR BETTER.
2. ALL LUMBER IN DIRECT CONTACT W/ SALTWATER SHALL BE TREATED - 2.5 CCA
3. ALL LUMBER IN DIRECT CONTACT W/ GROUND SHALL BE TREATED - .6 CCA
4. ALL PILING BOLTS SHALL BE HOT DIPPED GALVANIZED.
5. ALL PILING BOLTS SHALL UTILIZE WASHERS.

SHEATHING REQUIREMENTS:

1. EXTERIOR WALLS - 7/16" PLYWOOD STRUCTURAL 1 SHEATHING - 10D NAILS - 4"X8" NAIL PATTERN (BLOCKING REQUIRED)
2. ROOF DECK - 7/16" PLYWOOD OR OSB SHEATHING - 10D NAILS - 4"X8" NAIL PATTERN (NO BLOCKED)
3. OVERHANGS - NAIL WOOD SOFFITS USING 8D NAIL (.099" SHANK) AT 6" O.C. (NO BLOCKED)

COMPONENT AND CLADDING PRESSURES: — GARAGE DOOR PRESSURE REQUIREMENTS: -35 PSF, +28 PSF

WINDOW AND DOOR PRESSURE REQUIREMENTS		SIDING AND OTHER MATERIAL PRESSURE REQUIREMENTS(10 SQ.FT)
WITHIN 5' OF CORNERS	45 PSF	45 PSF
FARTHER THAN 5' OF CORNERS	40 PSF	

Windborn debris protection - Protection of Openings – R301.2.1.2 Exterior glazing's in buildings within the windborne debris regions must be protected from windborne debris. Windborne debris region is defined as sites where Vult greater than or equal to 140 mph. Wood structural panels with a minimum thickness of 7/16 and a span less than or equal to 8' are allowed. Panels must be predrilled for fasteners. Corrosion resistant fasteners must be permanently mounted to the framing. Fastener size and spacing shall be designed to resist C&C loads per Table R301.2.1.1 or use Table R301.2.1.2 for buildings with MRH less than or equal to 45 ft and Vult less than or equal to 180 mph. May also use a proprietary shutter system that satisfies C&C loads and is installed per a product evaluation report

Windborne Debris Requirements:

1. When needed: When the Vult (Wind speed) is greater than 140 mph. See S2 of the drawings. 3rd line down states "Wind Conditions" - This is the Vult Wind speed
2. Min. Plywood Size: 7/16" Wood Structural Panel
3. Minimum Size: 3/16" Diameter SCREWS/LAGS WITH 3/4" DIAMETER X 3/4" THICK WASHERS.
4. Minimum Penetration into Stud: 2 in
5. Coatings: Epoxy Coated (min.)- (Depending on Locations)Send for approval (Stainless for Vult=150 mph or greater)
6. Edge distance for plywood and stud: 3/4"
7. Fastener spacing: Fasteners shall be 6" from each corner and spaced 12" thereafter (This is good for pressures up to 50 psf and with window sizes up to an Area of 20 square feet)

Roof Pressures according to ASCE 7-05: (10 sq. ft. areas)

Field Zone: N/A
Edge Zone: N/A
Corner Zone: N/A

Wall Sheathing/Roof decking:

Wall Sheathing and roof decking shall be per plan unless thicker Plywood/OSB Substrate is required by manufacturer/TDI product evaluation for all exterior Siding and Roof components.

Brick Ties:

All brick ties and fasteners shall either be stainless steel and meet ASTM A167, hot dipped galvanized after fabrication and meet ASTM A123 or ASTM A153 or hot-dip galvanized or galvanealed prior to fabrication and meet ASTM A653.

Fasteners:

FASTENERS IN AREAS WITH 150 MPH OR GREATER NOMINAL VELOCITIES SHALL BE HOT DIPPED GALVANIZED OR STAINLESS.

Components and Cladding Items:

Windows: *All windows shall meet the pressures specified in this document. All windows shall either have a valid test report from a 3rd party laboratory or have a valid product evaluation that has been approved by the Texas Department of Insurance (http://www.tdi.texas.gov/wind/prod/index.html). Please send all test reports or product evaluation to SETE for review PRIOR to ordering materials.*

Doors : *All doors shall meet the pressures specified in this document. All doors shall either have a valid test report from a 3rd party laboratory or have a valid product evaluation that has been approved by the Texas Department of Insurance (http://www.tdi.texas.gov/wind/prod/index.html). Please send all test reports or product evaluation to SETE for review PRIOR to ordering materials.*

Roofing: *All roofing materials shall meet the pressures specified in this document. All roofing components shall either have a valid test report from a 3rd party laboratory or have a valid product evaluation that has been approved by the Texas Department of Insurance (http://www.tdi.texas.gov/wind/prod/index.html). Please send all test reports or product evaluation to SETE for review PRIOR to ordering materials.*

Siding: *All siding shall meet the pressures specified in this document. All siding shall either have a valid test report from a 3rd party laboratory or have a valid product evaluation that has been approved by the Texas Department of Insurance (http://www.tdi.texas.gov/wind/prod/index.html). Please send all test reports or product evaluation to SETE for review PRIOR to ordering materials.*

CLIP/STRAPS:

1. ALL CLIPS/STRAPS NOTED WITHIN THESE DRAWINGS ARE SIMPSON STRONG-TIE PRODUCTS UNLESS NOTED OTHERWISE.
2. RAFTER TO RAFTER CONNECTIONS SHALL REQUIRE LSTA18 STRAPS FROM RAFTER TO RAFTER. (REFER TO DETAILS)
3. (1) H2.5A CLIP WILL BE REQUIRED FROM RAFTER TO TOP PLATE AT 16" O.C. (UNO)
4. (1) H2.5A CLIP WILL BE REQUIRED FROM TOP PLATE TO STUD AT 16" O.C. (UNO)
5. (1) H2.5A CLIP WILL BE REQUIRED FROM STUD TO SILL PLATE AT 16" O.C. (UNO) ON ALL SLAB ON GRADE AND POST TENSION FOUNDATIONS. (SEE DETAILS)
6. (1) LSTA36 STRAP WILL BE REQUIRED FROM STUD TO STRINGER/ BAND JOIST ON ALL PIER AND BEAM HOUSES UNLESS NOTED OTHERWISE ON THESE DRAWINGS. (REFER TO THE DRAWINGS)
7. ALL OTHER FRAMING CONNECTORS ARE CALLED OUT WITHIN THESE DRAWINGS.
8. ALL METAL FRAMING CONNECTORS IN CONTRACT WITH TREATED LUMBER MUST BE "Z" TYPE. CONSULT MANUFACTURER INSTALLATION INSTRUCTIONS FOR NAILS SIZES. FILL ALL HOLES.

SIDING/ SOFFIT/ WINDOW/ DOOR MATERIALS:

1. ALL SIDING, WINDOW, AND DOOR PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER INSTALLATION INSTRUCTIONS AND MUST MEET THE PRESSURE REQUIREMENTS SPECIFIED ON THIS SHEET.
2. ALL SIDING SHALL HAVE A WATER RESISTANT BARRIER BEHIND THE EXTERIOR CLADDING AS REQUIRED BY SECTION R703.2. THIS MEANS ONE LAYER OF #15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. OTHER APPROVED MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE WATER RESISTIVE BARRIER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. WIND PRESSURE RESISTANCE OF SIDING, SOFFIT AND BACKING MATERIALS SHALL BE DETERMINED BY ASTM E330 OR OTHER APPLICABLE STANDARD TEST METHODS.
4. REFER TO TABLE 703.3 FOR ATTACHMENTS OF TYPICAL SIDING'S.
5. WOOD STRUCTURAL PANEL SOFFITS SHALL BE 3/8" THICK AND SHALL BE FASTENED TO FRAMING OR NAILING STRIPS WITH 2" X .099" NAILS. FASTENERS SHALL BE IN SPACED NOT LESS THAN 6" ON CENTER AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
6. FASTENERS - EXTERIOR COVERING AND ROOF OVERHANG SOFFITS SHALL BE SECURELY FASTENED WITH ALUMINUM, GALVANIZED, STAINLESS OR RUST PREVENTATIVE COATED NAILS OR IN ACCORDANCE WITH THE MANUFACTURER INSTALLATION INSTRUCTIONS. NAILS SHALL COMPLY WITH ASTM F1667.
7. ALL FASTENERS SHALL PENETRATE A MIN. OF 1 1/2" INTO STRUCTURAL MEMBERS.
8. FLASHING - APPROVED CORROSION RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER INTO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF ADHERED MEMBRANES SHALL COMPLY WITH AAMA 711 AND FLUID APPLIED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 714.
9. EXTERIOR WINDOW AND DOOR FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH.
10. ALL COMPONENTS - WHERE FLASHING INSTRUCTIONS OR DETAILS ARE NOT PROVIDED, PAN FLASHING SHALL BE INSTALLED AT THE SILL OF EXTERIOR WINDOW AND DOOR OPENINGS. OPENINGS USING PAN FLASHING SHALL INCORPORATE FLASHING OR PROTECTION AT THE HEAD AND SIDES. REFER TO 703.4 FOR ADDITIONAL FLASHING NOTES.
11. STUCCO - REFER TO IRC 703.7 FOR NOTES.

BRICK NOTES:

1. A MINIMUM 6 INCH BY 4 IN BY 5/16" STEEL ANGLE, WITH THE LONG LEG PLACED VERTICALLY, SHALL BE ANCHORED TO DOUBLE 2X4 WOOD STUDS AT A MINIMUM ON CENTER SPACING OF 16"O.C. ANCHORAGE OF THE STEEL ANGLE AT EVERY DOUBLE STUD SPACING SHALL BE NOT LESS THAN (2) 5/8" DIAMETER X 4 IN LAG SCREWS FOR WOOD CONSTRUCTIONS. THE STEEL ANGLE SHALL HAVE A MINIMUM CLEARANCE TO UNDERLYING CONSTRUCTION OF 1/4" OF AN INCH. NOT LESS THAN 5/8 THE WIDTH OF THE BRICK VENEER THICKNESS SHALL BEAR ON THE TEL ANGLE.
2. FLASHING AND WEEP HOLES SHALL BE LOCATED PER FIGURE 703.8.2.1.
3. THE MAXIMUM HEIGHT OF MASONRY VENEER ABOVE THE STEEL ANGLE SUPPORT SHALL BE 12"-8". (FOR NOTES ABOVE)
4. ALL LINTELS SHALL HAVE A LENGTH OF BEARING NOT LESS THAN 4". STEEL LINTELS SHALL BE SHOP COATED WITH A RUST INHIBITIVE PAINT, EXCEPT FOR LINTELS MAD OF CORROSION RESISTANT STEEL.
5. ANCHORAGE - MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION RESISTANCE METAL TIES EMBEDDED IN MORTAR OR GROUND AND EXTENDING INTO THE VENEER A MINIMUM OF 1 1/2" WITH NOT LESS THAN 5/8" MORTAR OR GROUT COVER TO OUTSIDE OF FACE.
6. VENEER TIES, IF STRAND WIRE, SHALL BE NOTE LESS IN THICKNESS THAN NO.9 U.S. GAGE (.0148") WIRE AND SHALL HAVE A HOOK EMBEDDED IN THE MORTAR JOINT, OR IF SHEET METAL SHALL BE NOT LESS THAN NO. 22 GAGE BY 7/8 CORRUGATED BRICK TIE SPACING SHALL BE 16" O.C. BOTH DIRECTIONS. 12" O.C. SPACING IS REQUIRED AROUND ALL OPENINGS.
7. BRICK TIE FASTENERS SHALL BE 8D COMMON NAILS (2 1/2" X .131" SHANK). ALL FASTENERS SHALL HAVE RUST INHIBITIVE COATING SUITABLE FOR THE INSTALLATION IN WHICH THEY ARE BEING USED. 1" NOMINAL AIR SPACE IS REQUIRED BETWEEN SHEATHING AND VENEER.

GENERAL - FASTENERS

1. FASTENERS FOR PRESERVATIVE WOOD - FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE TREATED WOOD SHALL BE HOT DIPPED, ZINC COATED GALVANIZED STEEL, SILICON BRONZE OR COPPER. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, A MINIMUM OF NOT LESS THAN ASTM A 653 TYPE G185 ZINC COATED GALVANIZED STEEL OR EQUIVALENT SHALL BE USED.
   EXCEPTIONS:
   A. 1/2" DIAMETER OR GREATER STEEL BOLTS.
2. FASTENERS FOR FIRE-RETARDANT TREATED WOOD USED IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS: FASTENERS, INCLUDING NUTS AND WASHERS , FOR FIRE RETARDANT TREATED WOOD USED IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS SHALL BE HOT DIPPED, ZINC COATED GALVANIZED STEEL, STAINLESS, SILICON BRONZE OR COPPER. FASTENERS OTHER THAN NAILS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM.
3. CORROSIVE ENVIRONMENTS (ASCE 24-14) - REQUIRES STRUCTURAL STEEL EXPOSED TO SALTWATER, SALT SPRAY, OR OTHER CORROSIVE MATERIAL BE HOT-DIPPED GALVANIZED AFTER FABRICATE AND OTHER SECONDARY COMPONENTS TO MEET THE REQUIREMENTS OF SECTION 5.2.1.

GENERAL STUCCO NOTES:

1. THE CONTRACTOR MUST PROVIDE THE ICC-ES(ICC EVALUATION SERVICES) REPORT FOR REVIEW TO THE ENGINEER AND APPROVAL PRIOR TO STARTING THE INSTALLATION OF THE STUCCO.
2. ESR-2772 - EAGLE ONE COAT EXTERIOR STUCCO SYSTEM IS APPROVED FOR USE. INSTALL PER THIS REPORT.
3. INSTALL METAL LATHE USING RING SHANK ROOFING NAILS AT 6" O.C. IN ALL DIRECTIONS. LATHE MUST MEET ALL SPECIFIED ASTM REQUIREMENTS. MIN. 18 GAUGE. LATHE TO BE NAILED AT 6" O.C. AT ALL LAPS AND EDGES.
4. INSTALL CONTROL JOINTS EVERY 15' (MAX). FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ALL CONTROL JOINT INSTALLATIONS.

WOOD ROOF/CEILING FRAMING:

1. SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS20.
2. THE ROOF AND CEILING COMPONENTS SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO THE AWC NDS.
3. ALL RAFTERS/CEILING JOISTS SPECIFIED IN THIS DRAWING SET SHALL BE SYP#2 OR BETTER UNLESS BETTER MATERIAL IS NOTED.
4. HIP AND VALLEY RAFTERS SHALL NOT BE LESS THAN 2IN NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF A RAFTER. (REFER TO DRAWINGS)
5. RAFTER SUPPORTS - WHERE THE ROOF PITCH IS LESS THAN 3:12, STRUCTURAL MEMBERS THAT SUPPORT RAFTERS, SUCH AS RIDGES, HIPS, AND VALLEY'S SHALL BE DESTINED AS BEAMS AND THE BEARING SHALL BE 1 1/2" OR GREATER FOR WOOD RAFTERS OR CEILING JOISTS.
6. COLLAR TIES SHALL BE OF 2X4 CONSTRUCTION AND SPACED AT 32" O.C. UNLESS NOTED DIFFERENTLY IN THIS SET OF DRAWINGS. IN "SEAWARD" AREA'S WHERE NOMINAL WIND VELOCITY'S ARE ABOVE 155 MPH COLLAR TIES SHALL BE SPACED AT 16" O.C. ALL COLLAR TIES TO BE LOCATED 1/3 DOWN FROM TOTAL ROOF HEIGHT UNLESS OTHERWISE SPECIFIED IN THESE DRAWINGS.
7. END OF CEILING JOISTS SHALL BE LAPPED A MIN. OF 3". (UNO)
8. CUTTING, DRILLING OR NOTCHING IN ANY MEMBERS IS NOT ALLOWED UNLESS SPECIFIED AND APPROVED PER THE DESIGN ENGINEER.

REQUIREMENTS FOR ROOF COVERINGS:

1. ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOAD SPECIFIED ON THIS SHEET.
2. UNDERLAYMENT - UNDERLAYMENT FOR ASPHALT SHINGLES, CLAY, AND CONCRETE TILE, METAL ROOF SHINGLES, MINERAL SURFACED ROLL ROOFING, SLATE AND SLATE-TYPE SHINGLES AND METAL ROOF PANELS SHALL CONFORM TO THE APPLICABLE STANDARDS. UNDERLAYMENT MATERIAL SHALL COMPLY WITH ASTM D226, D1970, D4869, AND D6757 AND SHALL BEAR A LABEL INDICATING COMPLIANCE. REFER TO SECTION R905.1.1 FOR EXCEPTIONS.
3. ASPHALT SHINGLE UNDERLAYMENTS SHALL MEET ASTM D226 TYPE II, ASTMD D4869 TYPE III OR TYPE IV OR ASTM D6757 FOR 140 MPH OR GREATER NOMINAL WIND VELOCITIES. REFER TO TABLE R905.1.1 FOR OTHER OPTIONS. (15# FELT CAN NOT BE USED)
4. ASPHALT SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D7158. ASPHALT SHINGLE SHALL BEAR A LABEL TO INDICATE COMPLIANCE WITH ASTM D7158.
   EXCEPTION: ASPHALT SHINGLES NOT INCLUDED IN THE SCOPE OF ASTM D7158 SHALL BE TESTED AND LABELED IN ACCORDANCE WITH ASTM D3161. ASPHALT SHINGLE SHALL BEAR A LABEL TO INDICATE COMPLIANCE WITH ASTM D3161.
5. ASTM D7158 CLASSIFICATIONS FOR 140 MPH OR GREATER = TYPE G OR H. 168 MPH OR GREATER - TYPE H ONLY. ASTM D3161 CLASSIFICATION FOR 140 MPH OR GREATER=TYPE F
6. SHINGLE SHALL NOT BE INSTALLED ON SLOPES LESS THAN 2:12.
7. FLASHING SHALL BE INSTALLED BY THE MANUFACTURER INSTALLATION INSTRUCTIONS.
8. FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 3/8" DIAMETER HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIAL AND LESS THAN 3/4" INTO ROOF SHEATHING. WHERE THE ROOF SHEATHING IS LESS THAN 3/4" THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING.
9. CLOSED VALLEYS - VALLEY COVERED WITH SHINGLES - VALLEY LINING OF ONE PLY OF SMOOTH ROLL ROOFING COMPLYING WITH ASTM D6380 AND NOT LESS THAN 36" IN WIDTH. SELF ADHERING POLYMER MODIFIED BITUMEN UNDERLAYMENT COMPLYING WITH D1970 SHALL BE PERMITTED.
10. ALL SHINGLES SHALL BE INSTALLED PER THE MANUFACTURE INSTALLATION INSTRUCTIONS.
11. IT IS PREFERRED THAT ALL SHINGLES BE HAND NAILED.

ADDITIONAL NOTES:

1. CARE MUST BE TAKEN TO ENSURE NAILS ARE NOT OVER DRIVEN IN SHEATHING, DECKING, SIDING AND SIMILAR APPLICATIONS.
2. ALL EXPOSED LUMBER SHALL BE TREATED.
3. THE ENGINEER OF RECORD MUST CONTACTED WHEN CONFLICTS IN STRUCTURAL REQUIREMENTS ARE DISCOVERED. DO NOT PROCEED UNTIL RESOLUTION OF CONFLICTS ARE COMPLETE.
4. ALL WOOD BELOW BFE SHALL BE PRESSURE TREATED. THIS INCLUDES SHEATHING.
5. REFER TO DRAWINGS FOR HEADER CALLOUTS.
6. ALL DIMENSIONS IN THIS DRAWING PACKAGE ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY CONTRACTOR/ OWNER PRIOR TO STARTING CONSTRUCTION.
7. ALL DECK FASTENERS SHALL BE HOT DIPPED, STAINLESS, SILICON BRONZE OF COPPER.

ALLOWABLE DEFLECTIONS OF STRUCTURAL MEMBERS:

1. RAFTERS HAVING SLOPES GREATER THAN 3:12 WITH FINISHED CEILING NOT ATTACHED TO RAFTERS = L/180
2. INTERIOR WALL PARTITIONS = L/180
3. FLOORS = L/360
4. CEILING WITH BRITTLE FINISHES (PLASTER/STRUCCO) = L/360
5. CEILING WITH FLEXIBLE FINISHES - L/240
6. ALL OTHER STRUCTURAL MEMBERS = L/240
7. EXTERIOR WALLS WIND LOADS(PLASTER/STUCCO) = L/360
8. EXTERIOR WALLS WIND LOADS (BRITTLE FINISHES =L/240
9. EXTERIOR WALLS WIND LOADS (FLEXIBLE FINISHES = L/120
10. LINTELS SUPPORTING MASONRY VENEER = L/600

NOTES:
A. CALCULATE DEFLECTIONS USING 70% OF COMPONENT AND CLADDING PRESSURES FOR WIND.
B. FOR CANTILEVER MEMBERS, L SHALL BE TAKEN AS TWICE THE LENGTH OF THE CANTILEVER.

WES BUCHHORN, PE
TIM BUCHHORN, PE

THIS DRAWING SET SHALL NOT BE USED FOR PERMITTING OR CONSTRUCTION UNLESS AN ENGINEERING SEAL FROM SOUTHEAST TEXAS ENGINEERING AND INSPECTIONS IS AFFIXED TO ALL I SHEETS AND G SHEETS AND S SHEETS
FIRM REGISTRATION #13882

NO.	ISSUE / REVISION	DATE
	ORIGINAL RELEASE	1-18-21
	REVISED	1-27-21

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ENGINEER STAMP AND SIGNATURE

STATE OF TEXAS
WESLEY ALLAN BUCHHORN
108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: GENERAL REQUIREMENTS

DATE: JAN. 27, 2021

SCALE: NTS

SHEET: G1

GENERAL NOTES: SITE PREPARATION - SLAB ON GRADES/ POST TENSION SLABS

1. SITE PREPARATION BENEATH THE SLAB SHALL BE IN ACCORDANCE WITH THE SOIL REPORT RECOMMENDATIONS (IF SUPPLIED) AND/OR FOLLOWING THE SOIL TABLES IRC 2015. - UNLESS NOTED OTHERWISE IN THIS SET OF DRAWINGS.
   A. CLEARING AND THE STRIPPING OF ANY VEGETATION AND ROOTS.
   B. ANY MATERIALS CONTAINING SIGNIFICANT ORGANIC MATERIAL FROM THE FOUNDATION FOOT PRINTS. (SOILS HAVING MORE THAN TEN PERCENT BY VOLUME ARE CONSIDERED HAVING ORGANIC MATERIAL)
   C. EXPOSED SUBGRADE SURFACES SHALL BE PROOF ROLLED WITH A LOADED HEAVY EARTHWORK PIECE OF MACHINERY.
   D. FILL SHALL BE BROUGHT IN 8" LIFTS, TYPICAL.
   E. SOIL CONDITIONS SHALL BE WITHIN 2% WET OPTIMUM MOISTURE AND COMPACTED TO A MIN. 95% OF THE MAXIMUM DRY DENSITY DETERMINED BY ASTMD-698 (STANDARD PROCTOR)
2. FILL SOILS THAT SUPPORT FOOTING AND FOUNDATIONS SHALL BE DESIGNED, INSTALLED AN TESTED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

SELECTION AND PLACEMENT OF FILL:

1. STRUCTURAL FILL SHOULD BE LOW PLASTICITY SANDY CLAYS OR IMPORTED CALICHES SAND. (PI BETWEEN 8-15)
2. PARTICULAR ATTENTION SHOULD BE GIVEN TO MAINTAINING THE PROPER MOISTURE CONTENT DURING COMPACTION AND TO PREVENTING THE FILL FROM DRYING BEFORE SUBSEQUENT LIFTS ARE PLACED. IF WEAK OR SOFT AREAS ARE OBSERVED DURING PROOF ROLLING OPERATIONS, THE SOIL IN THE SUBJECT AREA SHOULD BE REMOVED TO EXPOSE COMPETENT SUBGRADE SOILS IN BOTH HORIZONTAL AND VERTICAL LIMITS. THE EXCAVATED SOILS, PROVIDED THEY ARE NOT CONTAMINATED WITH DELETERIOUS MATERIALS, OR CLEAN IMPORTED FILL SOILS CAN BE USED TO RESTORE GRADE AT THESE ISOLATED AREA'S,) ANY IMPORT FILL SHOULD MEET THE REQUIREMENT FOR SELECT FILL.

FINAL GRADE AROUND THE STRUCTURE:

1. ELEVATION OF GROUND SURFACE ADJACENT TO THE FOUNDATION SHOULD BE A MINIMUM OF AT LEAST (12) INCHES BELOW THE FINISHED FLOOR.
2. THE SLOP OF THE GROUND SURFACE AWAY FROM THE STRUCTURE SHOULD BE A MINIMUM OF (5) PERCENT OR A DISTANCE OF AT LEAST (10) FEET.
3. A (3) FT WIDE MOW BAND AROUND THE FOUNDATION PERIMETER CAN ALSO BE INSTALLED TO MITIGATE MOISTURE CHANGES AFFECTING THE FOUNDATION PERFORMANCE.

GENERAL NOTES: DESIGN

FOUNDATION SYSTEM:

1. THE FOUNDATION IS DESIGNED IN ACCORDANCE WITH CURRENT ACCEPTABLE ENGINEERING PRACTICES FOR THE SITE SHOWN ON THE PLANS. ANY OF THE FOLLOWING COULD BE USED TO DESIGN THE FOUNDATION SHOWN ON THESE PLANS.
   A. ACI-318 (LATEST EDITION)
   B. POST TENSIONING INSTITUTE
   C. FEMA 550
   D. IRC 2015
   E. IBC 2015
2. ALL SLABS MOVE WITH SOILS BELOW DUE TO MOISTURE VARIATIONS IN THE SOIL CAUSING EXPANSION AND CONTRACTION OF THE SOILS. CONCRETE MAY ALSO SUSTAIN NORMAL TEMPERTURE AND SHRINKAGE CRACKS AS A RESULT OF THE CONCRETE CURING PROCESS OR CONCRETE MIXTURE.
2. SLAB ON GRADE EXTERIOR GRADE BEAMS MUST EXTEND A MIN. OF 18" INTO VIRGIN SOILS OR INTO PROPERLY PREPARED, COMPACTED, AND MOISTURE SOILS UNLESS NOTED OTHERWISE IN THIS SET OF DRAWINGS,
   IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE FOUNDATION IS NOT INSTALLED DURING A VERY DRY OR VERY WET PERIODS. ABNORMAL CONDITIONS COULD CAUSE THE FOUNDATION TO BE EXPOSED TO LOADS IN WHICH THEY WERE NOT DESIGNED.
3. CONTRACTOR IS TO CONTACT THE ENGINEER PRIOR TO SITE PREPARATION IF THE SLAB IS TO BE LOCATED IN AN AREA WITH A SLOPE OF MORE THAN 10%.
4. ALL GRADES MUST PROVIDE EFFECTIVE DRAINAGE AWAY FROM THE BUILDING DURING AND AFTER CONSTRUCTION. WATER PERMITTED TO POND NEXT TO THE BUILDING CAN RESULT IN GREATER SOIL MOVEMENTS AND CAN RESULT IN UNACCEPTABLE DIFFERENTIAL FLOOR SLAB MOVEMENT, CRACKED SLAB, AND WALLS, AND ROOF LEAKS.
5. WATER SHALL NOT BE ADDED TO CONCRETE AT THE JOB SITE UNLESS APPROVED BY THE ENGINEER. A SLUMP TEST CAN BE PERFORMED IF MORE WORKABILITY IS NEEDED FOR THE PROJECT.
6. CONCRETE SHALL NOT BE PLACED AT TEMPERATURES LESS THAN 40 DEGREES, IN RAINY WEATHER OR IN OTHER ADVERSE WEATHER CONDITIONS.
7. A 6 MIL POLYETHYLENE VAPOR BARRIER SHALL BE PLACED UNDER ALL SLABS WITH ALL SEAMS TAPED.
8. FORMS SHALL BE INSTALLED PER THE CONTRACTOR TO ENSURE FORMS DO NOT DEFLECT OR BEND UNDER SIDE LOADING OF THE CONCRETE. FORMS SHALL BE NOT BE REMOVED PRIOR TO 24 HOURS OF PLACING CONCRETE NOR SHALL THAN BE REMOVED MORE THAN 7 DAYS AFTER PLACEMENT OF CONCRETE.
9. KEEP ALL SLABS MOIST FOR A MINIMUM 7 DAYS AFTER PLACING CONCRETE.
10. IT IS THE RESPONSIBILITY OF THE BUILDER/ CONTRACTOR TO VERIFY ALL DIMENSIONS, SLOPES, OFFSETS, ELEVATION CHANGES, LEDGES AND INSERTS FOR THIS FOUNDATION DESIGN PRIOR TO SITE PREPARATION.
11. ALL DIMENSIONS ARE INTERPRETED FROM AND SHALL BE VERIFIED WITH THE ARCHITECTURAL SET OF DRAWINGS BY THE BUILDER AND BE COMPARED WITH THE ELECTRICAL, PLUMBING, AND MECHANICAL DRAWINGS.
12. NO CONDUIT, PIPING, OR VENTS LARGER THAN 3" O.D. SHALL RUN IN STRUCTURAL CONCRETE MEMBERS UNLESS SHOWN ON STRUCTURAL DRAWINGS. CONDUITS, PIPING, VENTING TO BE POSITIONED SO AS TO NOT REDUCE SLAB THICKNESS OR BEAM DIMENSIONS.

GENERAL NOTES - REINFORCING STEEL FOR SLAB ON GRADE

1. ALL REBAR SHALL BE GRADE 60 UNLESS NOTED OTHERWISE. (40 GRADE FOR #3)
2. ALL REBAR SHALL BE PER ASTM A615 GRADE 60 WITH DEFORMATION PER ASTM A305 AN SHALL BE DETAILED AND INSTALLED PER ACI AS STATED ABOVE.

SLAB DESIGN INFORMATION IF AVAILABLE:
BEARING: N/A
CENTER LIFT: N/A
EDGE LIFT: N/A
CONCRETE COMPRESSIVE STRENGTH: 3000 PSI (AT 28 DAYS)
ANCHOR BOLTS: F1554 GRADE 36 ⅝" DIAMETER X 10" X 32" O.C.)
ANCHOR BOLT WASHERS: .229" X 3"X3" (IF <400 PLF NOMINAL)
NOTES: ALL ANCHOR BOLTS SHALL BE HDG.

SOIL REPORT INFORMATION IS SHOWN ON S-2

3. CORNER BARS SHALL BE INSTALLED AT ALL EXTERIOR CORNERS. ALL CORNER BARS SHALL BE 2'X2' #5 BARS UNLESS NOTED OTHERWISE.
4. SLAB MATS TO BE CONSTRUCTED OF #3 REBAR GRID @ 16" O.C. BOTH DIRECTIONS OR PER THIS SET OF DRAWINGS.
5. MINIMUM CLEAR COVER FROM REINFORCEMENT TO CONCRETE:
   A. CONCRETE CAST AGAINST PERMANENTLY EXPOSED EARTH: 3"
   B. CONCRETE EXPOSED TO EARTH OR WEATHER (#3-#5 BAR): 1 ½"
   C. CONCRETE EXPOSED TO WEATHER OR IN CONTRACT WITH GROUND(SLABS): ¾"
   D. PRIMARY REINFORCEMENT TIES AND STIRRUPS: 1 ½"

GENERAL NOTES: MISCELLANEOUS

1. PROVIDE SUITABLE WIRE SPACERS, CHAIRS, TIES, ETC. FOR SUPPORTING REINFORCING STEEL IN THE PROPER POSITION BEFORE PLACING CONCRETE.
2. DRILLED FOOTING INSTALLATIONS MUST BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE REFERENCE SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED FOOTINGS AND COMMENTARY. FURTHERMORE, IT SHOULD COMPLY WITH THE U.S. DEPARTMENT OF TRANSPORTATION, DRILLED SHAFTS CONSTRUCTION PROCEDURES.
3. DRILLED FOOTINGS SHALL BE FREE OF LOOSE MATERIALS AND WATER PRIOR TO CONCRETE PLACEMENTS. PLACEMENTS AND CONCRETE SHOULD BE POURED IMMEDIATELY AFTER DRILLING HOLES.

LAP SPLICE LENGTHS

CONCRETE SLAB AREA COLUMN/BEAMS/WALLS			
#4	2'-0" MIN. LAP	#8	4'-0" MIN. LAP
		#7	3'-8" MIN. LAP
		#6	3'-6" MIN. LAP
		#5	2'-8" MIN. LAP

CONCRETE CRACK CONTROL:
1. INSTALL CRACK CONTROL JOINTS @ 15'-0" O.C.E.W. IF CRACK CONTROL IS NOT A CONSIDERATION AS DETERMINED BY BOTH THE BUILDER AND THE OWNER, THEN THE JOINTS MAY BE ELIMINATED.
2. CREATE CRACK CONTROL JOINTS BY TOOLING (DO NOT SAWCUT) TO A DEPTH OF ONE THIRD THE SLAB THICKNESS. TOOL THE BASE OF ALL DROPS-IN-SLAB TO FUNCTION AS CONTROL JOINTS.
3. INSTALL VERTICAL EXPANSION JOINTS IN MASONRY AND STUCCO VENEERS AT EACH CONTROL JOINT AND AT APPROXIMATELY 15' O.C.

GENERAL NOTES - POST TENSION SLABS:

1. ALL TENDONS SHALL BE 270K GRADE, 7 WIRE STRAND, ½" IN DIAMETER (UNLESS NOTED OTHERWISE), GREASED AND SHEATHING WITH A CONTINUOUS SHEATHING. TEMPORARY STRESSING LOAD ON ½" TENDON SHALL BE 33K.
2. ALL TENDONS SHALL BE MONO-STRAND, UN-BONDED TENDON ANCHORAGE UTILIZING A CAST WEDGE PLATE AND A TWO PIECE WEDGE AS MANUFACTURED BY P.T.I. APPROVED MANUFACTURER.
3. PARTIAL STRESSING OF POST TENSIONED TENDONS REQUIRED BETWEEN 24 AND 56 HOURS. PARTIAL STRESSING LOAD SHALL BE 50% FINAL LOAD. FINAL STRESSING TO OCCUR WITHIN 7 DAYS OF CONCRETE PLACEMENT.
4. (2) #5 - 2'X2' CORNER BARS REQUIRED AT ALL EXTERIOR CORNERS. TOP FOR BEAMS REINFORCED WITH CABLES OR 2'X2' CORNER BARS EQUAL TO STEEL BEAMS SIZE AND SPACING IF BEAM IS STEEL REINFORCED. DEEPENED BEAMS TO HAVE CORNER BARS WITH DIAMETER EQUAL TO HORIZONTAL STEEL AT EACH HORIZONTAL BAR.
5. MEASURABLE TENDON ELONGATIONS SHALL BE WITHIN 10% OF THEORETICAL ELONGATIONS.
6. CUT TENDONS SHALL BE CUT AT 1 IN. FROM THE WEDGE POCKETS AND SHALL BE FILLED WITH NON-SHRINK GROUT.
7. BRICK WORK SHALL NOT START (IF APPLICABLE) PRIOR TO CABLES BEING STRESSED.
8. SETE DOES NOT TAKE ANY RESPONSIBILITY OF THE FUNCTIONALITY OF THE FINISHED SLAB IF SETE DOES NOT INSPECT THE SLAB PRIOR TO PLACING CONCRETE AND IF SETE DOES NOT MEASURE THE ELONGATIONS OF THE CABLES PRIOR TO CUTTING. THIS MEANS THAT SETE WILL EXCEPT NO RESPONSIBILITY OF THE FOUNDATION DESIGN IF THE ABOVE ARE NOT FOLLOWED.

ADDITIONAL FOUNDATION NOTES:

1. THE FOUNDATION IS DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE IRC CODE OR OTHER DOCUMENTS/ REFERENCES ALLOWED BY THE CODE.
2. IF AT ANY TIME THE PLANS CONFLICT WITH A GEO-TECHNICAL SOILS REPORT, PLEASE STOP ALL CONSTRUCTION AND CONTACT SETE IMMEDIATELY.
3. IF NO SOIL REPORT IS PROVIDED FOR A PARTICULAR PROJECT BY THE CLIENT AND/ OR CONTRACTOR, THEN THE DESIGN WILL BASED SOLELY ON AVERAGE SOIL CONDITIONS FOR THAT PARTICULAR AREA (GENERAL LOCATION) OF THE PROPOSED CONSTRUCTION SITE, BY USING ACCEPTED ENGINEERING PRACTICE.

VENTILATION NOTES FOR ENCLOSURE OF PIER AND BEAM FOUNDATIONS (R408.1):

1. THE MIN. NET AREA OF VENTILATION OPENINGS SHALL BE NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDER-FLOOR SPACE AREA, UNLESS THE GROUND SURFACE IS COVERED BY CLASS 1 VAPOR RETARDER MATERIAL. WHERE CLASS 1 VAPOR RETARDER MATERIAL IS USED, THE MIN. NET AREA OF VENTILATION OPENINGS SHALL BE NOT LESS THAN 1 SQUARE FOOT FOR EACH 1500 SQUARE FEET OF UNDER-FLOOR SPACE AREA. ONE SUCH VENTILATING OPENING SHALL BE WITHIN 3 FEET OF EACH EXTERIOR CORNER.

ALLOWABLE MATERIALS INCLUDE:

1. EXPANDED SHEET METAL PLATES NOT LESS THAN .047" THICK.
2. PERFORATED SHEET METAL PLATES NOT LESS THAN .070" THICK
3. CAST IRON GRILL OR GRATING
4. EXTRUDED LOAD-BEARING BRICK VENTS
5. HARDWARE CLOTH OF .035" WIRE OR HEAVIER
6. CORROSION RESISTANT WIRE MESH, WITH THE LEST DIMENSION BEING ⅛" THICK

FLOOD RESISTANT MATERIALS PER FEMA TECHNICAL BULLETIN 2 BELOW BFE:

1. SOLID, STANDARD, STRUCTURAL (2X4'S)
2. SOLID, DECAY RESISTANT
3. WATER RESISTANT, FIBER REINFORCED GYPSUM EXTERIOR SHEATHING
4. MARINE GRADE PLYWOOD
5. PRESERVATIVE TREATED, (ACQ OR (C-A)
6. REFER TO FEMA TB-2 FOR ADDITIONAL OPTIONS

NAILING SCHEDULE, UNO ON PLANS

(WHICHEVER SUPERCEDES)

JOINT DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	NAIL SPACING
WALL FRAMING			
Top plate to top plate (face-nailed)	2-10d	2-10d	per 4 inches
Top plates at intersections (face-nailed)	5-10d	5-10d	joints - each side
Stud to stud (face-nailed)	2-10d	2-10d	8"o.c.
Header to header (face-nailed)	2-10d	2-10d	8"o.c. along edges
Top or bottom plate to stud (end-nailed)	3 -10d	3 -10d	per stud
Bottom plate to floor joist, bandjoist, endjoist or blocking (face-nailed)	3-10d	3-10d	per 6"
FLOOR FRAMING			
Joist to sill, top plate or girder (toe-nailed)	4-10d	4-10d	per joist
Bridging to joist (toe-nailed)	2-10d	2-10d	each end
Blocking to joist (toe-nailed)	2-10d	2-10d	each end
Blocking to sill or top plate (toe-nailed)	3-10d	4-10d	each block
Ledger strip to beam (face-nailed)	3-10d	4-10d	each joist
Joist on ledger to beam (toe-nailed)	3-8d	3-10d	per joist
Band joist to joist (end-nailed)	5-10d	5-10d	per joist
Band joist to sill or top plate (toe-nailed)	2-10d	3-10d	8" o.c.
CEILING SHEATHING			
Gypsum wallboard	5d coolers	5d coolers	7"edge/7"field
WALL SHEATHING			
PLYWOOD/OSB	10d	10d	4"edge/8"field
FLOOR SHEATHING			
Structural panels: 1" or less	10D	10d	3"edge/6"field
Structural panels: greater than 1"	10d	10d	3"edge/6"field
Diagonal board sheathing: 1"x6" or 1"x8"	2-10d	2-10d	per support
Diagonal board sheathing: 1"x10" or wider	3-10d	3-10d	per support
ROOF FRAMING			
Rafter to top plate (toe-nailed)	4 -10d	4 -10d	per rafter
Ceiling joist to top plate (toe-nailed)	4 -10d	4 -10d	per joist
Ceiling joist to parallel rafter (face-nailed)	7 -10d	7 -10d	each lap
Ceiling joist laps over partitions (face-nailed)	7 -10d	7 -10d	each lap
Collar tie to rafter (face-nailed)	7 -10d	7 -10d	per tie
Blocking to rafter (toe-nailed)	2-10d	2-10d	each end
Rim board to rafter (end-nailed)	3-10d	3-10d	each end
ROOF SHEATHING			
PLYWOOD/OSB	10D	10d	4"edge/6"field
Diagonal board sheathing: 1"x6" or 1"x8"	2-10d	2-10d	per support
Diagonal board sheathing: 1"x10" or wider	3-10d	3-10d	per support

BASE WALL PRESSURES
(MULTIPLY BY HEA FOR ACTUAL PRESSURES)
(FOR ENGINEER'S USE ONLY)

BASIC WIND SPEED (ASD)	ULT WIND SPEED (LRFD)	ZONE 4 (10 SQ.FT.)	ZONE 5 (10 SQ.FT.)
110 MPH	142 MPH	+21.8 PSF, -23.6 PSF	+21.8 PSF, -29.1 PSF
120 MPH	155 MPH	+23.8 PSF -28.1 PSF	+25.9 PSF, -34.7 PSF
130 MPH	168 MPH	+30.4 PSF, -33.0 PSF	+30.4 PSF, -40.7 PSF

WES BUCHHORN, PE
TIM BUCHHORN, PE

THIS DRAWING SET SHALL NOT BE USED FOR PERMITTING OR CONSTRUCTION UNLESS AN ENGINEERING SEAL FROM SOUTHEAST TEXAS ENGINEERING AND INSPECTIONS IS AFFIXED TO ALL I SHEETS AND G SHEETS AND S SHEETS
FIRM REGISTRATION #13882

NO.	ISSUE / REVISION	DATE
	ORIGINAL RELEASE	1-18-21
	REVISED	1-27-21

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ENGINEER STAMP AND SIGNATURE

STATE OF TEXAS
WESLEY ALLAN BUCHHORN
108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: GENERAL REQUIREMENTS 2
DATE: JAN. 27, 2021
SCALE: NTS
SHEET: G2

FASTENER/ CONNECTOR CORROSIVE APPLICATION CHART

AWPA USAGE CATAGORIES

UC1	INTERIOR/ DRY (INTERIOR FURNITURE, MILLWORK)
UC2	INTERIOR/ DAMP (INTERIOR BEAMS, FLOORING, FRAMING, SILL PLATES)
UC3A	ABOVE GROUND EXTERIOR (COATED MILLWORK, SIDING AND TRIM)
UC3B	ABOVE GROUND (FENCE PICKETS, DECKING, SILLS, WALKWAYS…) - SEE NOTE 1 UC4A
UC4A	IN CONTACT WITH GROUND, FRESH WATER, OR OTHER CONDITIONS FAVORABLE TO DETERIORATION (FENCE POSTS, DECK POSTS, GUARD POSTS, JOISTS AND BEAMS FOR DECKS DOCKS…) NOTE 1: SOME UC3B CONDITIONS REQUIRE UC4A
UC4B	GROUND CONTAT HEAVY DUTY (UTILITY POLES, WOOD FOUNDATIONS)
UC4C	EXTREME DUTY (LAND AND FRESH WATER PILING, UTILITY POLES IN SEMI TROPICAL(
UC5ABC	MARINE USE NORTHERN WATERS/ CENTRAL WATERS/ SOUTHERN WATERS (PILING AND BRACING, BULKHEADS …)

CORROSION RESISTANCE CLASSIFICATIONS

MATERIALS TO BE FASTENED

ENVIRONMENT	ENVIRONMENT	PRESERVATIVE TREATED WOOD					FRT WOOD
	UNTREATED WOOD OR OTHER MATERIAL	SBX-DOT ZINC BORATE	CHEMICAL < RETENTION AWPA, UC4A	CHEMICAL RETENTION AWPA, UC4A	>ACZA	OTHER OR UNCERTAIN	
DRY SERVICE	LOW	LOW	LOW	HIGH	MED	HIGH	MED
WET SERVICE	MED	N/A	MED	HIGH	HIGH	HIGH	HIGH
ELEVATED SERVICE	HIGH	N/A	SEVERE	SEVERE	HIGH	SEVERE	N/A
UNCERTAIN	HIGH	HIGH	HIGH	SEVERE	HIGH	SEVERE	SEVERE
OCEAN/WATERFRON	SEVERE	N/A	SEVERE	SEVERE	SEVERE	SEVERE	N/A

MINIMUM CORROSION RESISTANCE RECOMMENDATIONS

FASTENERS & ANCHORS

LOW	MEDIUM	HIGH	SEVERE
CLEAR (BRIGHT) ZINC (ASTM F1941) HEAVY ELECTRO-GALVANIZED (ASTM A641 CLASS 1) YELLOW ZINC (ASTM F1941) ELECTRO COAT (E-COAT) TYPE 410 STAINLESS	MECHANICALLY GALVANIZED (AS 3566.2-C3, N2000, ASTM B695-CLASS 55), HOT DIPPED GALVANIZED (ASTM A-153-CLASS D) TYPE 410 STAINLESS STEEL WITH PROTECTIVE TOP COAT	TYPE 304 STAINLESS TYPE 305 STAINLESS	TYPE 316 STAINLESS STEEL HOT DIPPED GALVANIZED (ASTM A153-CLASS C) SILICON BRONZE, COPPER

CONNECTORS - REFER TO MANUFACTURER'S RECOMMENDATIONS FOR EXACT REQUIREMENT

LOW	MEDIUM	HIGH	SEVERE
SIMPSON STRONG-TIE GRAY PAINTING POWDER COATING STANDARD G90 ZINC COATING	Z-MAX (G185) HOT DIPPED GALVANIZED (ASTM A123)	TYPE 316L STAINLESS STEEL	TYPE 316L STAINLESS

LOW LEVEL OF RESISTANCE CLASSIFICATIONS

DEFINITIONS:

1. CLEAR ZINE - ELECTROPLATED CLEAR ZINC IS APPLIED IN ACCORDANCE WITH ASTM F1941. IN THE ASTM B117 SALT SPRAY TEST, CLEAR ZINC PROVIDES 12 TO 24 HOURS OF CORROSION PROTECTION BEFORE THE FIRST APPEARANCE OF RED RUST DEPENDING ON COATING THICKNESS.
2. CLASS 1 ZINCE ELECTROPLATE - ELECTROPLATED ZINC APPLIED IN ACCORDANCE WITHASTM A641, CLASS 1. THIS IS AN ELECTROPLATED ZINC COATING THAT PROVIDES A LOW LEVEL CORROSION RESISTANCE. THE CLASS 1 COATING HAS NO SPECIFIED RED RUS PERFORMANCE CRITERIA IN THE B117 SALT SPRAY TEST.
3. YELLOW ZINE - ELECTROPLATED ZINC APPLIED IN ADCCORDANCE WITH ASTM F1941. IN THE ASTM B117 SALT SPRAY TEST, YELLOW ZINC PROVIDES AT LEAST 24 HOURS OF CORROSION PROTECTION BEFORE THE FIRST APPEARANCE OF RED RUST.
4. ELECTRO COAT - ELECTRO COAT UTILIZES ELECTRICAL CURRENT TO DEPOSIT THE COATING MATERIAL ONTO THE FASTENER. AFTER APPLICATION, THE COATING IS OVEN CURED. ELECTRO COAT IS INTENDED FOR DRY, LOW CORROSIONS APPLICATIONS.
5. TYPE 410 STAINLESS STEEL - TYPE 410 STAINLESS STEEL IS A LOW-CARBON MARTENSITIC GRADE OF STAINLESS STEEL THAT CAN BE HARDENED AND IS INHERENTLY MAGNETIC. THIS MATERIAL PROVIDES RESISTANCE IN MILD ATMOSPHERE AND MANY MILD CHEMICAL ENVIRONMENTS.

MEDIUM LEVEL OF RESISTANCE CLASSIFICATIONS

DEFINITIONS:

1. C-3 MECHANICALLY GALVANIZED - A MECHANICALLY APPLIED COATING THAT IS ZINC WITH A MIN. OF 20% TIN IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3566.2. IN THE ASTM B117 SALT SPRAY TEST AT 1,000 HOURS OF EXPOSURE, FASTENERS WITH THE C3 COATING EXHIBIT AVERAGE RED RUST OF LESS THAN 2%.
2. N2000 MECHANICALLY GALVANIZED - THIS IS A MECHANICALLY APPLIED PROPRIETARY ZINC COATING WITH A SUPPLEMENTARY OVERCOAT. IN THE ASTM B117 SALT SPRAY TEST AT 1000 HOURS OF EXPOSURE, FASTENERS WITH THE N2000 COATING EXHIBIT AVERAGE RUST LESS THAN 15%.
3. CLASS 55 MECHANICALLY GALVANIZED, ASTM B695 - THIS IS A MECHANICALLY APPLIED ZINC COATING THAT MEETS THE REQUIREMENTS OF ASTM B695, CLASS 55, WHICH IS A MIN. AVERAGE THICKNESS OF 55 MICRONS WITH A SUPPLEMENTARY OVERCOAT. SCREWS WITH A CLASS 55 COATING MEET THE REQUIRMENTS FOR USE IN PRESERVATIVE TREATED AND FIRE RETARDANT TREATED WOOD AS STATED IN THE 2012 AND 2015 IRC.
4. CLASS D HOT DIP GALVANIZED, ASTM A153 - THE CLASS D HOT DIPPED GALVANIZATION IS A COATING THAT MEETS THE REQUIREMENTS OF ASTM A153, CLASS D, WHICH IS A MIN. AVERAGE OF 1.0 OZ/FT^2 OF ZINC APPLIED BY A HOT-DIPPED PROCESS. HOT DIPPED GALVANIZED FASTENERS ARE COMPLIANT WITH THE 2012 AND 2015 IBC AND IRC.

HIGH LEVEL OF RESISTANCE CLASSIFICATIONS

DEFINITIONS:

1. TYPE 304 AND 305 STAINLESS STEEL - NICKEL-CHROMIUM AUSTENITIC GRADES OF STAINLESS STEEL. THESE (2) TYPES ARE NOT HARDENED BY HEAT TREATMENT AND ARE INHERENTLY NON MAGNETIC. THEY PROVIDE VERY GOOD CORROSION RESISTANCE AND COMPLY WITH THE 2012 AND 2015 IBC/IRC.

SEVERE LEVEL OF RESISTANCE CLASSIFICATIONS

DEFINITIONS:

1. TYPE 316 STAINLESS STEEL - TYPE 316 STAINLESS STEEL IS A NICKEL CHROMIUM AUSTENITIC GRADE OF STAINLESS STEEL WITH 2-3% MOLYBDENUM. TYPE 316 IS NOT HARDENED BY HEAT TREATMENT AND IS INHERENTLY NON MAGNETIC. IT PROVIDES A LEVEL OF CORROSION PROTECTION SUITABLE FOR SEVERE ENVIRONMENTS, ESPECIALLY ENVIRONMENTS WITH CHLORIDES. TYP 316 STAINLESS-STEEL IS COMLIANT WITH THE 2012 AND 2015 IBC/IRC.
2. CLASS C HOT DIPPED GALVANIZED, ASTM A153 - CLASS C HOT DIPPED IS A COATING THAT MEETS THE REQUIREMENT OF ASTM A153, CLASS C, WHICH IS A MIN. AVERAGE OF 1.25 OZ/FT^2 OF ZINC APPLIED BY A HOT DIP PROCESS. HOT DIP GALVANIZED FASTENERS ARE COMPLIANT WITH THE 2012 AND 2015 IBC/IRC.

COPPER - COPPER WIRE USED FOR THE MANUFACTURE OF FASTENERS IS IN COMPLIANCE WITH THE MATERIAL SPECIFICATIONS OF ASTM F1667. COPPER FASTENERS MEET THE REQUIREMENTS FOR THE USE IN PRESERVATIVE-TREATED AND FIRE-RETARDANT WOOD AS STATED IN THE 2012, 2015 AND 2018 IRC/IBC. COMPATIBILITY WITH PROPRIETARY WOOD TREATMENT CHEMICAL SHOULD BE VERIFIED AGAINST APPLICABLE EVALUATION REPORTS.

NOTES: ALL THE INFORMATION SHOWN WAS TAKEN FROM SIMPSON STRONG-TIE FOR INFORMATIONAL PURPOSES ONLY. SETE DOES NOT TAKE CREDIT FOR ANY OF INFORMATION SHOWN.

QUICK CHART LOOK-UP REFERENCE CHART

EXPOSED:

LOCATION: 3000FT OR GREATER FROM SALT AIR/ SALT WATER CONDITIONS:
EXPOSED - WET SERVICE
ANCHORAGE LOCATION: PRESERVATIVE TREATED WOOD (LESS THAN UC4A)
CORROSION RESISTANCE: MEDIUM

SIMPSON CONNECTORS COATING REQUIREMENTS:
Z-MAX (G185)
HOT DIPPED GALVANIZED (ASTM A123)
TYPE 316L STAINLESS

FASTENER COATING REQUIREMENTS:
MECHANICALLY GALVANIZED - AS 3566.2-C3
MECHANICALLY GALVANIZED - N2000
MECHANICALLY GALVANIZED - ASTM B695-CLASS 55
HOT DIPPED GALVANIZED (ASTM A-153- CLASS D
TYPE 410 STAINLESS STEEL WITH PROTECTIVE TOP COAT

NOT-EXPOSED:

LOCATION: 3000FT OR GREATER FROM SALT AIR/ SALT WATER CONDITIONS:
EXPOSED - DRY SERVICE
ANCHORAGE LOCATION: PRESERVATIVE TREATED WOOD (LESS THAN UC4A)
CORROSION RESISTANCE: LOW

SIMPSON CONNECTORS COATING REQUIREMENTS:
SIMPSON STRONG-TIE GRAY PAINTING
POWDER COATING
STANDARD G90 ZINC COATING

FASTENER COATING REQUIREMENTS:
CLEAR (BRIGHT) ZINC (ASTM F1941)
HEAVY ELECTRO-GALVANIZED (ASTM A641 CLASS 1)
YELLOW ZINC (ASTM F1941)
ELECTRO COAT (E-COAT)
TYPE 410 STAINLESS

EXPOSED OR NOT-EXPOSED:

LOCATION: 3000FT-1320FT TO SALT AIR/ SALT WATER
CONDITIONS: EXPOSED - DRY OR WET SERVICE
ANCHORAGE LOCATION: PRESERVATIVE TREATED WOOD (LESS THAN UC4A)
CORROSION RESISTANCE: MEDIUM

SIMPSON CONNECTORS COATING REQUIREMENTS:
Z-MAX (G185)
HOT DIPPED GALVANIZED (ASTM A123)
TYPE 316L STAINLESS

FASTENER COATING REQUIREMENTS:
MECHANICALLY GALVANIZED - AS 3566.2-C3
MECHANICALLY GALVANIZED - N2000
MECHANICALLY GALVANIZED - ASTM B695-CLASS 55
HOT DIPPED GALVANIZED (ASTM A-153- CLASS D
TYPE 410 STAINLESS STEEL WITH PROTECTIVE TOP COAT

EXPOSED OR NOT-EXPOSED:

LOCATION: OCEANFRONT/WATER FRONT
CONDITIONS: EXPOSED - DRY OR WET SERVICE
ANCHORAGE LOCATION: PRESERVATIVE TREATED WOOD (LESS THAN UC4A)
CORROSION RESISTANCE: SEVERE

SIMPSON CONNECTORS COATING REQUIREMENTS:
TYPE 316L

FASTENER COATING REQUIREMENTS:
TYPE 316 STAINLESS STEEL
HOT DIPPED GALVANIZED (ASTM A153
CLASS C) OR SILICON BRONZE OR COPPER

WES BUCHHORN, PE
TIM BUCHHORN, PE

NO.	ISSUE / REVISION	DATE
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	REVISED	1-27-21

SOUTHEAST TEXAS ENGINEERING AND INSPECTIONS, LLC
(OFFICE) 409-741-8741
(WES) 409-795-1415
(TIM) 409-795-1181
8017 HARBORSIDE DRIVE,
GALVESTON, TX 77554
SOUTHEASTTEXASENGINEERING.COM

ENGINEER STAMP AND SIGNATURE

STATE OF TEXAS
WESLEY ALLAN BUCHHORN
108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

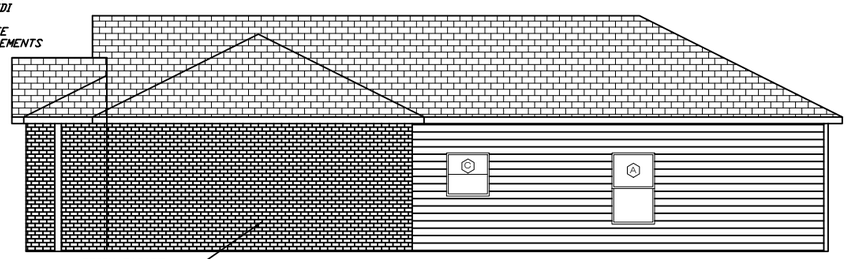
TITLE	ANCHOR/ FASTENER CORROSIVE APPLICATION CHART
DATE	JAN. 27, 2021
SCALE	NTS
SHEET	G4

FRONT ELEVATION

OPTION 3

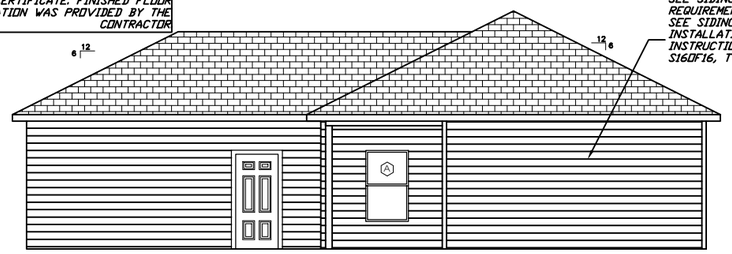
LAG:	34.1'
HAG:	35.6'
COR:	34.2'
F.F.:	36.6'

INFORMATION ABOVE WAS PROVIDED BY THE ELEVATION CERTIFICATE. FINISHED FLOOR ELEVATION WAS PROVIDED BY THE CONTRACTOR



RIGHT ELEVATION

OPTION 3



REAR ELEVATION

OPTION 3

LEFT ELEVATION

OPTION 3

WES BUCHHORN, PE
TIM BUCHHORN, PE

THIS DRAWING SET SHALL NOT BE USED FOR PERMITTING OR CONSTRUCTION UNLESS AN ENGINEERING SEAL FROM SOUTHEAST TEXAS ENGINEERING AND INSPECTIONS IS AFFIXED TO ALL 1 SHEETS AND 6 SHEETS AND 5 SHEETS

FIRM REGISTRATION #13882

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ENGINEER STAMP AND SIGNATURE

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: ELEVATION VIEWS

DATE: JAN. 27, 2021

SCALE: 3/32"=1'

SHEET: A1

DOOR SCHEDULE			
MARK	QTY	DESCRIPTION	REMARKS
1	2	3'0"x6'8" EXTERIOR	--
2	1	3'0"x6'8" EXTERIOR	--
3	8	3'0"x6'8" INTERIOR	--
4	1	2'4"x6'8" INTERIOR	--
5	2	2'0"x6'8" INTERIOR	DBL DR.
6	2	22"X36" MIN. 350 LB RATED MIN.	

WINDOW SCHEDULE			
MARK	QTY	DESCRIPTION	REMARKS
A	8	3'0"x5'0" S.H.	--
C	1	3'0"x3'0" S.H.	--
			--

GENERAL NOTES:

EGRESS:

1. EACH BEDROOM MUST HAVE ONE WINDOW THAT COMPLIES WITH EGRESS CODES, IF THERE IS NO ACCESS TO THE EXTERIOR THROUGH A DOOR THE WINDOW MUST HAVE A MAXIMUM OPENING HEIGHT OF 44" ABOVE FINISHED FLOOR LINE OF THAT PARTICULAR ROOM.

FLASHING:

1. FLASHING SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, DECK AND WALL INTERSECTIONS, AT ALL CHANGES IN ROOF SLOPE OR DIRECTION, AND AROUND ROOF OPENINGS.
2. APPROVED CORROSION–RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH.

WINDOW INSTALLATION:

1. WINDOWS SHALL BE INSTALLED AND FLASHED IN ACCORDANCE WITH THE MANUFACTURES WRITTEN INSTALLATION INSTRUCTIONS, WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH WINDOW.

ELECTRICAL:

1. ALL SWITCHES SHALL BE SET AT 48" FROM FINISHED FLOOR.

2. ALL RECEPTACLES SHALL BE SET AT 15" ABOVE FINISHED FLOOR

ROOFING:

1. ASPHALT SHINGLES SHALL BE INSTALLED PER THE HIGH WIND INSTALLATION METHOD DEFINED BY THE MANUFACTURE

NOTES WERE PROVIDED BY OTHERS

TUBS AND SHOWER AREAS:

1. GLASS MAT GYPSUM BOARD IN COMPLIANCE WITH ASTM C1288,C1325, OR C1173 AND INSTALLED IN ACCORDANCE WITH MANUFACTURED RECOMMENDATIONS SHALL BE USED AS THE WALL PANELS IN ALL TUB AND SHOWER AREAS.

MECHANICAL AND HVAC:

1. ENERGY CALCULATIONS FOR HEATING AND COOLING CAPACITIES SHALL BE FURNISHED BY THE GENERAL CONTRACTOR AS AN ATTACHMENT TO THIS PLAN SET AT THE TIME OF APPLICATION FOR PERMIT.

2. MECHANICAL APPLIANCES SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR, AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION, OTHER APPLIANCES, OR ANY OTHER PIPING OR DUCTS NOT CONNECTED TO THE APPLIANCE BEING INSPECTED, SERVICED, REPAIRED, OR REPLACED. A LEVEL WORKING SPACE AT LEAST 30 INCHES DEEP AND 30 INCHES WIDE SHALL BE PROVIDED IN FRONT OF THE CONTROL SIDE TO SERVICE AN APPLIANCE.

3. FOUNDATIONS AND SUPPORTS FOR OUTDOOR MECHANICAL SYSTEMS SHALL BE RAISED AT LEAST 3 INCHES ABOVE THE FINISHED GRADE AND SHALL ALSO CONFORM TO THE MANUFACTURE'S INSTALLATION INSTRUCTIONS.

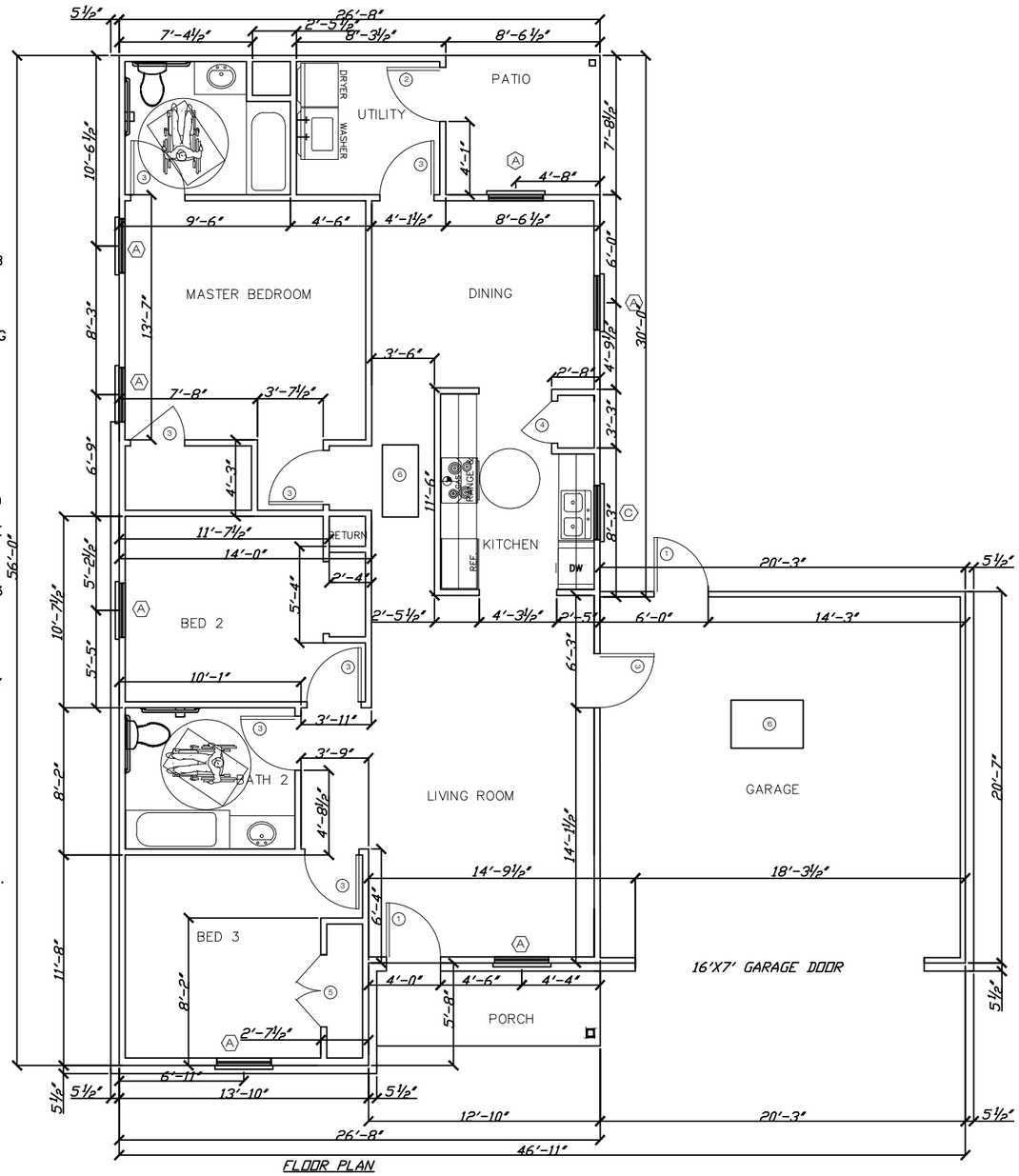
4. AUXILIARY DRAIN PAN. CATEGORY IV CONDENSING APPLIANCES SHALL BE PROVIDED WITH AN AUXILIARY DRAIN PAN WHERE DAMAGE TO ANY BUILDING COMPONENT WILL OCCUR AS A RESULT OF STOPPAGE IN THE CONDENSATE DRAIN PIPING SYSTEM. THESE PANS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTIONS M14113.

EXHAUST FANS AND VENTING:

1. OUTDOOR DISCHARGE. THE AIR REMOVED BY EVERY MECHANICAL SYSTEM SHALL BE DISCHARGED TO THE OUTDOORS. AIR SHALL NOT BE EXHAUSTED INTO ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.

2. EXHAUST AIR FROM BATHROOMS AND WATER CLOSETS SHALL NOT BE RECIRCULATED WITHIN A RESIDENCE OR TO ANOTHER DWELLING UNIT AND SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS AND SHALL NOT BE EXHAUSTED INTO ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.

3. DUCT LENGTH. THE MAXIMUM LENGTH OF A CLOTHS DRYER EXHAUST DUCT SHALL NOT EXCEED 25 FEET FROM THE DRYER LOCATION TO THE WALL OR ROOF TERMINATION. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED BY 2.5 FEET FOR EACH 45 DEGREE BEND AND 5 FEET FOR EVERY 90 DEGREE BEND. THE MAXIMUM LENGTH OF DUCT DOES NOT INCLUDE THE TRANSITION DUCT.



FLOOR PLAN

REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

SQUARE FOOTAGE:

LIVING:	1355 SQ.FT
FRONT PORCH:	59 SQ.FT.
REAR PORCH:	66 SQ.FT
GARAGE"	417 SQF.T
TOTAL:	1897 SQ.FT.

BRICK FOOTAGE:

LINEAR FEET OF BRICK (FULL HEIGHT) =105'-0" APPROXIMATELY
=53% BRICK (APPROX. - FV)

WES BUCHHORN, PE
TIM BUCHHORN, PE

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SOUTHEASTTEXASENGINEERING.COM

ENGINEER STAMP AND SIGNATURE

1-27-21

NEW RESIDENCE
LEMOINE

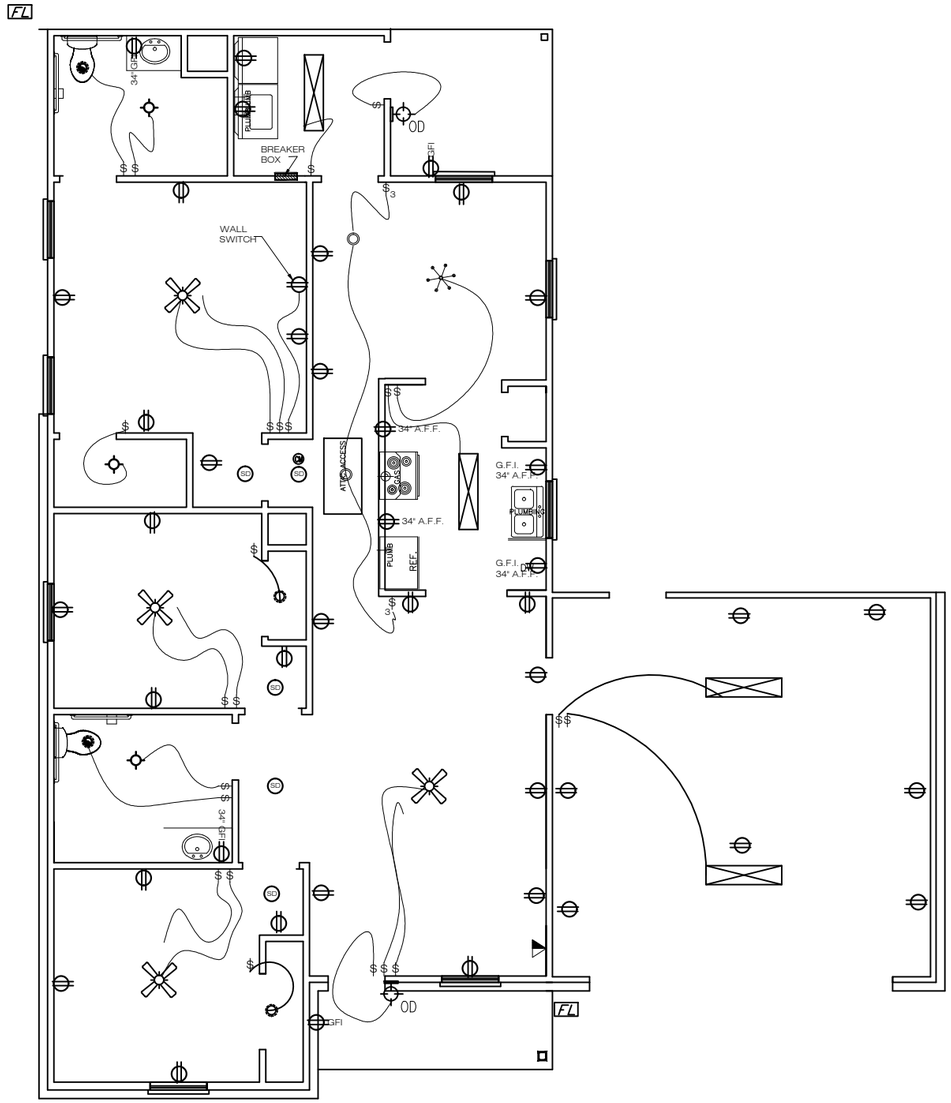
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: FLOOR PLAN

DATE: JAN. 27, 2021

SCALE: 1/8"=1'

SHEET: A2



ELECTRICAL LAYOUT

ELECTRICAL LAYOUT WAS PROVIDED BY OTHERS. SETE IS NOT LIABLE FOR ELECTRICAL LAYOUT OR LOCATIONS.

ELECTRICAL KEY

- FL — FLOOD LIGHT– DUSK TO DAWN – MOTION DETECTION
- EXHAUST FAN
- 220 — 220 VOLT OUTLET
- CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
- OD — WALL MOUNTED INCANDESCENT LIGHT FIXTURE
- $ — WALL SWITCH
- FLUORESCENT LIGHT FIXTURE
- CARBON/SMOKE DETECTOR HARDWIRED W/ BATTERY BACKUP
- CABLE TV
- DUPLEX CONVENIENCE OUTLET
- LIGHT PER CONTRACTOR
- CEILING MOUNTED INCANDESCENT LIGHT FIXTURE W/ ROUGH-IN FOR OPT. CEILING FAN

NOTES:

1. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (G.F.I.) AS INDICATED ON PLANS OR AS ITEM NO. 4 AND 5 BELOW INDICATES.

2. UNLESS OTHERWISE INDICATED, INSTALL SWITCHES AND RECEPTACLES AT THE FOLLOWING HEIGHTS ABOVE FINISHED FLOOR:
   - SWITCHES. . . . 48"
   - OUTLETS. . . . . 15"
   - TELEPHONE. . .15" (UNLESS ABV COUNTERTOP)
   - TELEVISION. . . 15"

3. ALL SMOKE DETECTORS SHALL BE HARDWIRED INTO AN ELECTRICAL POWER SOURCE AND SHALL BE EQUIPPED WITH A MONITORED BATTERY BACKUP. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS.

4. ALL 15A AND 20A RECEPTACLES IN SLEEPING ROOMS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, AND SIMILAR AREAS WILL REQUIRE A COMBINATION TYPE A.F.C.I. DEVICE.

5. ALL 15A AND 20A 120V RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROOMS SHALL BE G.F.C.I. PROTECTED (G.F.I).

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICIAN TO ENSURE THAT ALL ELECTRICAL WORK IS IN FULL COMPLIANCE WITH N.F.P.A. 70A–05, N.E.C. 2015, AND ALL APPLICABLE LOCAL STANDARDS, CODES, AND ORDINANCES.

7. EVERY BUILDING HAVING A FOSSIL–FUEL–BURNING HEATER OR APPLIANCE, FIREPLACE, OR AN ATTACHED GARAGE SHALL HAVE AN OPERATIONAL CARBON MONOXIDE DETECTOR INSTALLED WITHIN 10 FEET OF EACH ROOM USED FOR SLEEPING PURPOSES.

8. ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM THE LOCAL POWER UTILITY. SUCH ALARMS SHALL HAVE BATTERY BACKUP. COMBINATION SMOKE/CARBON MONOXIDE ALARMS SHALL BE LISTED OR LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.

9. BREAKER BOX – 48" TO TOP BREAKER MAX.

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WES BUCHHORN, PE
TIM BUCHHORN, PE

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SOUTHEASTTEXASENGINEERING.COM

ENGINEER STAMP AND SIGNATURE

1-27-21

NEW RESIDENCE
LEMOINE

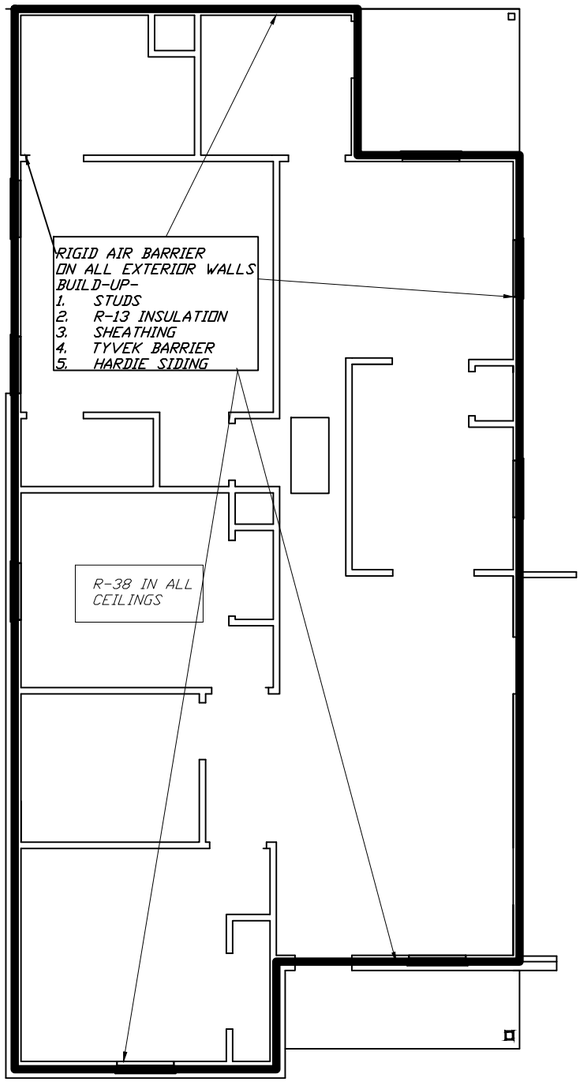
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: ELECTRICAL LAYOUT

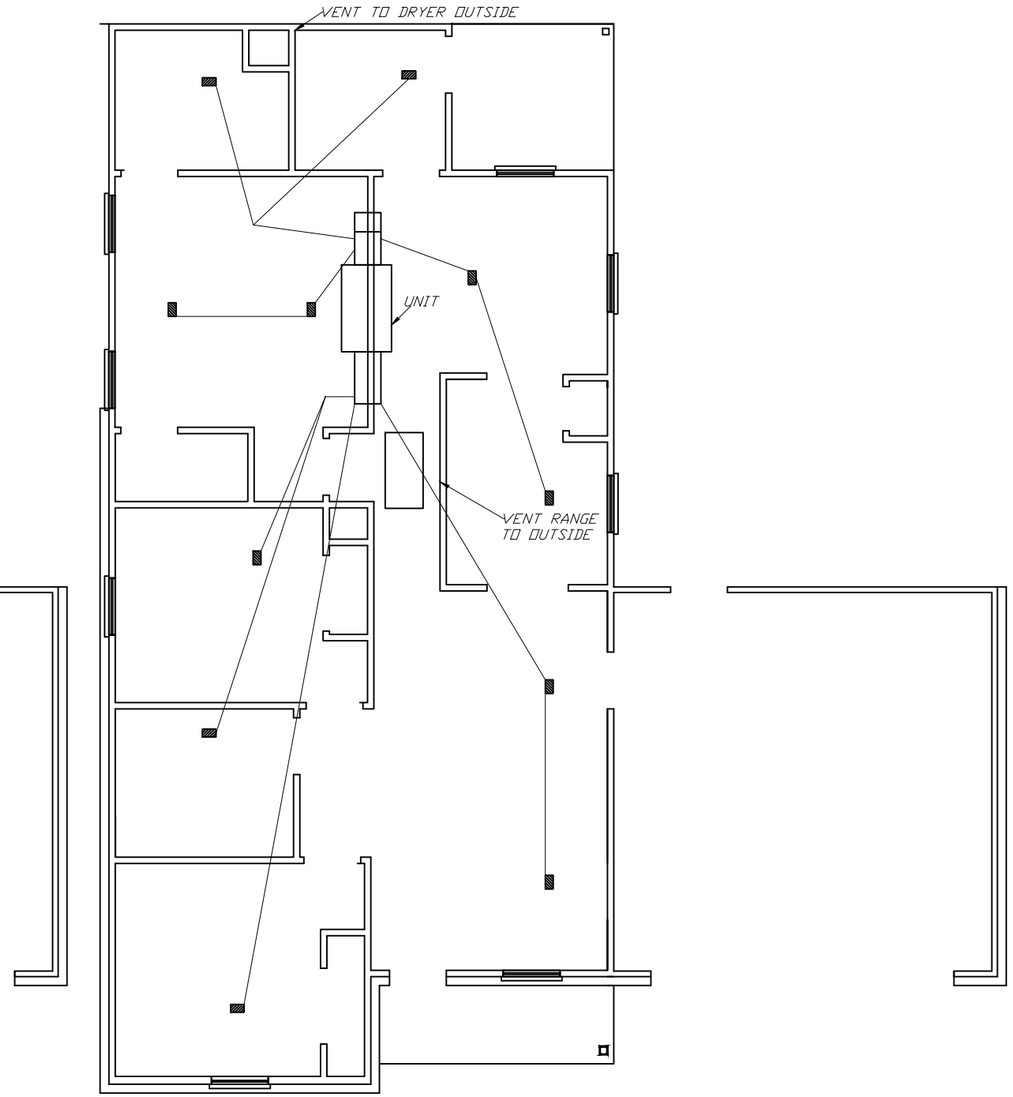
DATE: JAN. 27, 2021

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

SHEET: E1



THERMAL ENVELOPE LAYOUT
(PROVIDED BY CONTRACTOR)



HVAC DUCT LAYOUT
(PROVIDED BY CONTRACTOR)

DUCT R-VALUE= R-8

ALL DUCT SIZES, VENT SIZES, ETC. TO BE VERIFIED BY CONTRACTOR. ALL ABOVE ARE RECOMMENDATIONS ONLY.

WES BUCHHORN, PE
TIM BUCHHORN, PE

FIRM REGISTRATION #13882

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ENGINEER STAMP AND SIGNATURE

1-27-21

NEW RESIDENCE
LEMOINE

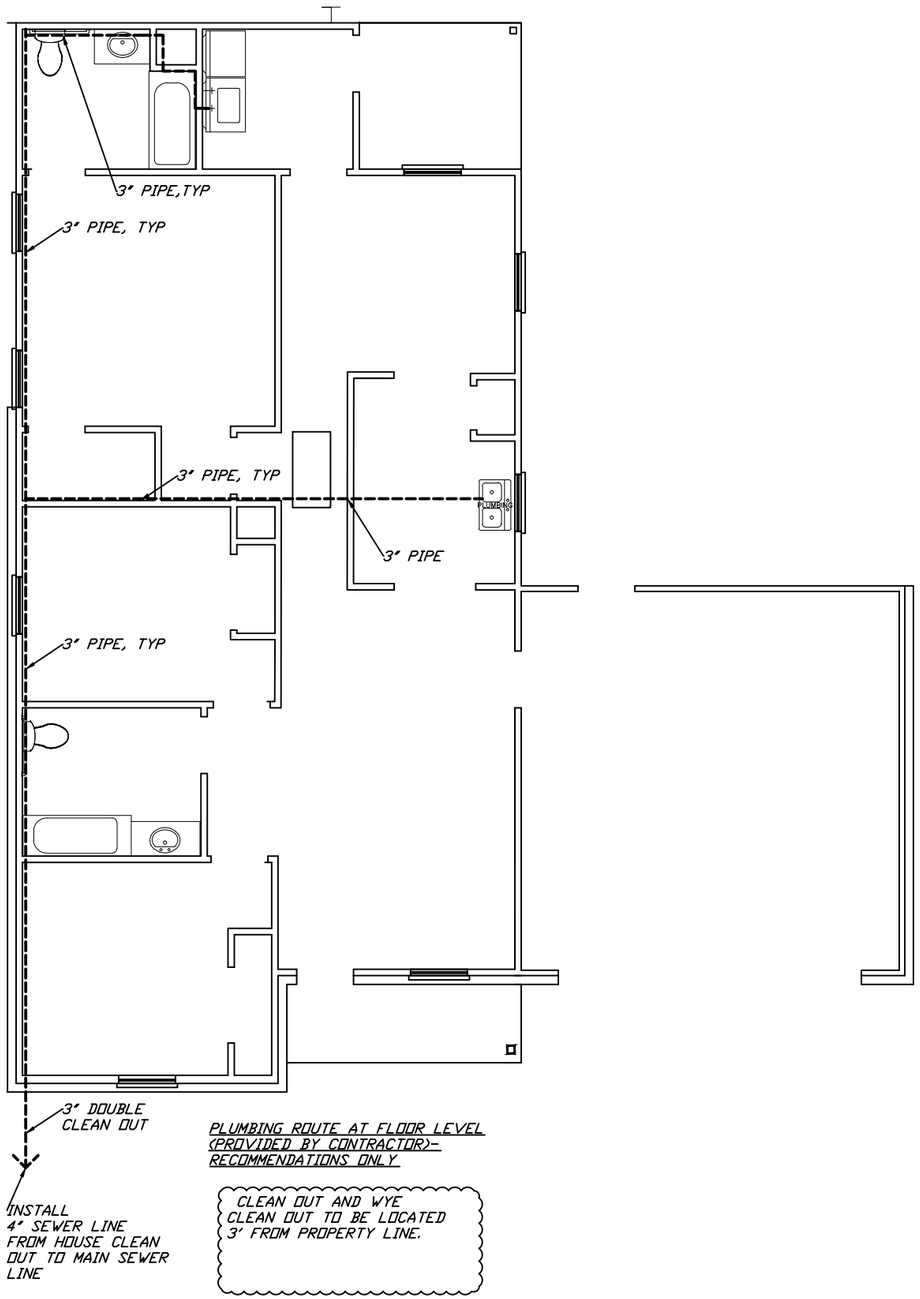
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: TYP.THERMAL/ HVAC. LAYOUT

DATE: JAN. 27, 2021

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

SHEET: H1



PLUMBING ROUTE AT FLOOR LEVEL (PROVIDED BY CONTRACTOR)- RECOMMENDATIONS ONLY

CLEAN OUT AND WYE CLEAN OUT TO BE LOCATED 3' FROM PROPERTY LINE.

WES BUCHHORN, PE
TIM BUCHHORN, PE

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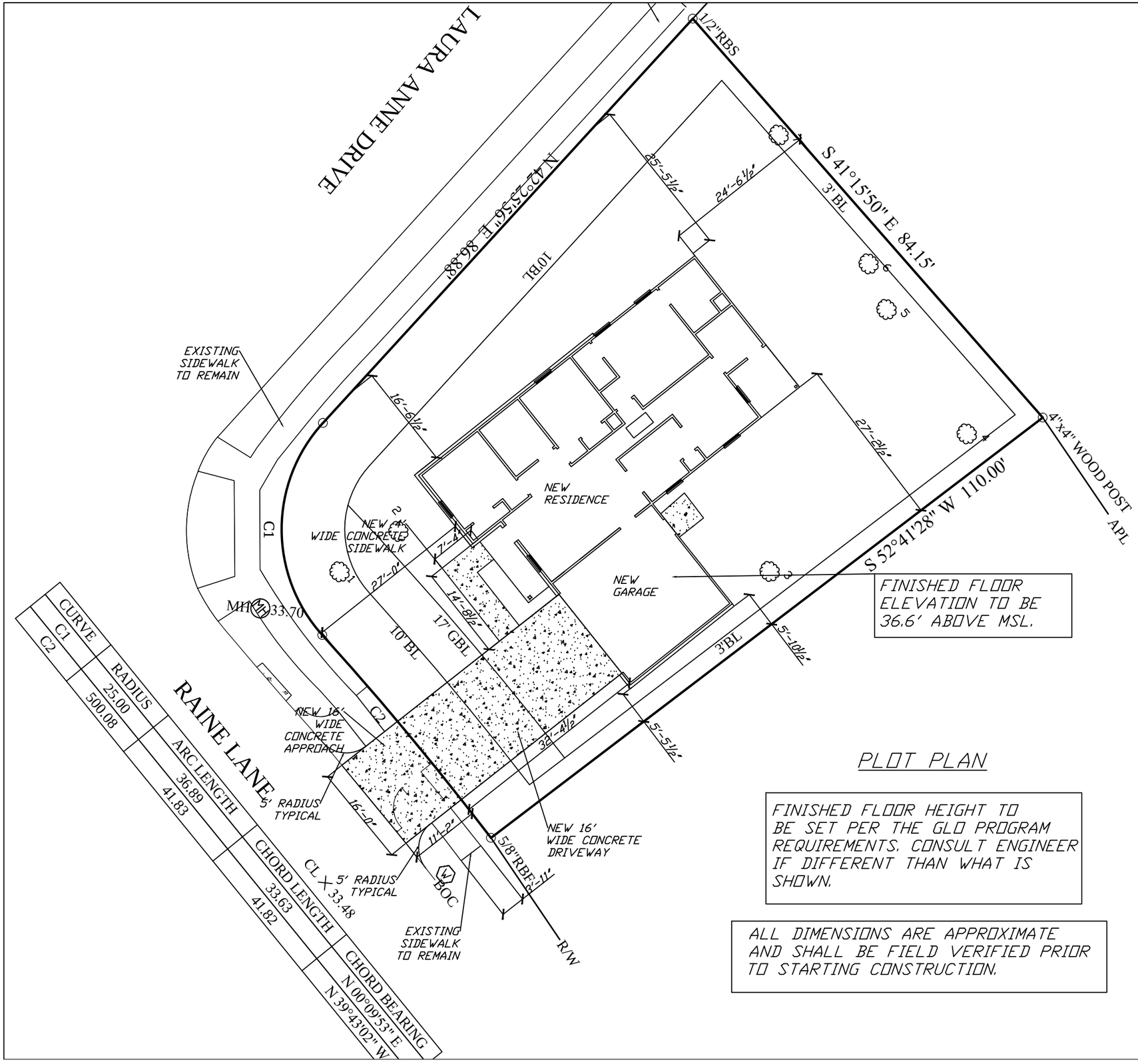
NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE
TYP. PLUMBING LAYOUT

DATE	
JAN. 27, 2021	
SCALE: 1/8"=1'-0"	SHEET: P1



FINISHED FLOOR ELEVATION TO BE 36.6' ABOVE MSL.

PLOT PLAN

FINISHED FLOOR HEIGHT TO BE SET PER THE GLO PROGRAM REQUIREMENTS. CONSULT ENGINEER IF DIFFERENT THAN WHAT IS SHOWN.

ALL DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED PRIOR TO STARTING CONSTRUCTION.

WES BUCHHORN, PE
TIM BUCHHORN, PE

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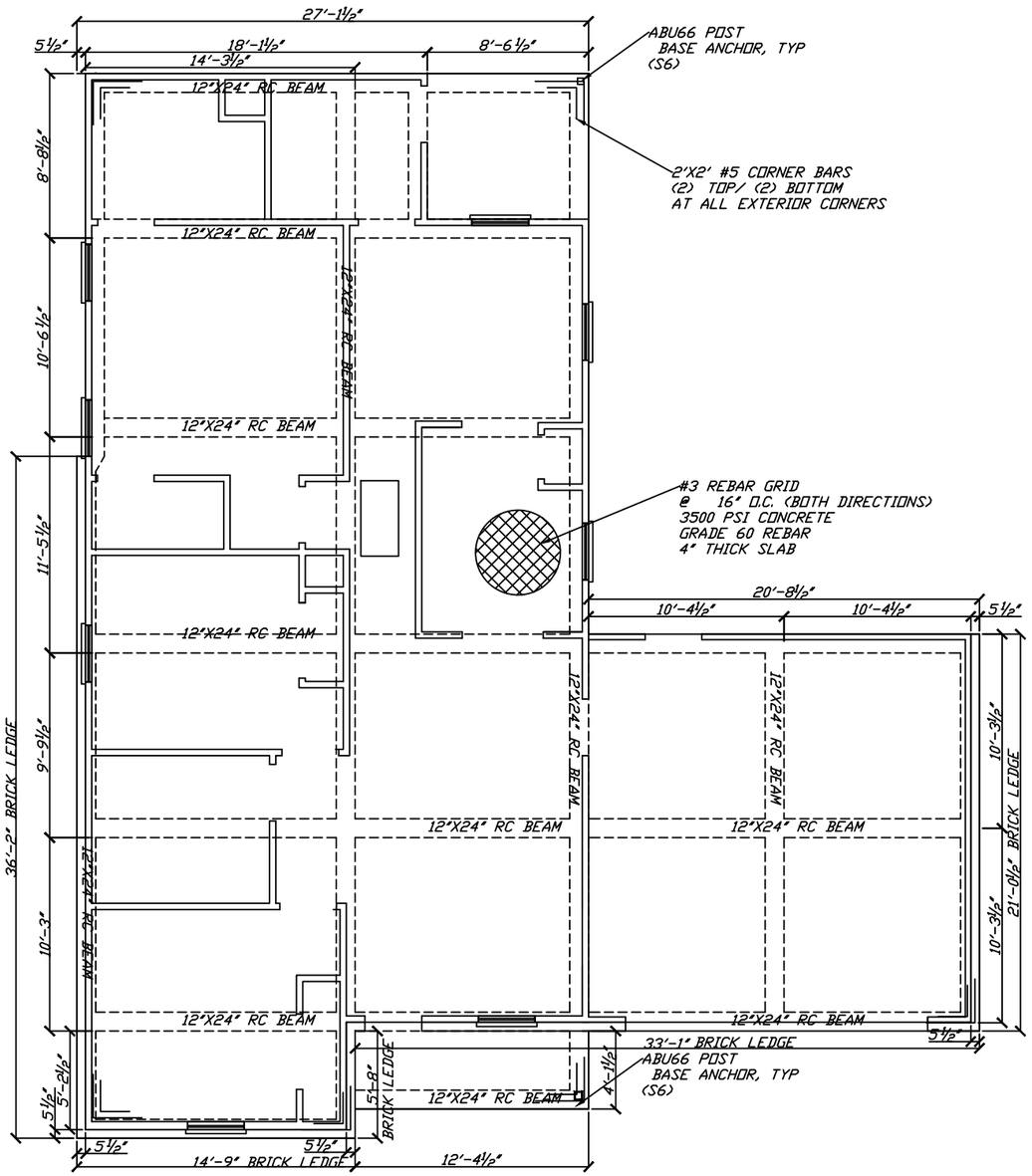
WESLEY ALLAN BUCHHORN
108508
LICENSED PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE	PLOT PLAN
DATE	JAN. 27, 2021
SCALE	NTS
SHEET	S0.5



FOUNDATION LAYOUT OVERLAYED FLOOR PLAN

NOTE: IF BEAMS DO NOT PENETRATE 12" BELOW EXISTING GRADE, THEN THE NEW FILL SHALL BE COMPACTED TO 95% OF ITS MAX DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698) - COMPACT AT 8" LIFTS.

ATTENTION TO CONTRACTOR

SEE SHEARWALL/HOLDOWN LAYOUT ON S3OF16 FOR ALL STHD14 SIMPSON EMBED HOLDOWN LOCATIONS

REFER TO G2 FOR FOUNDATION NOTES.
REFER TO S5 FOR BEAM DETAILS.

WES BUCHHORN, PE
TIM BUCHHORN, PE

FIRM REGISTRATION #13882

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108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

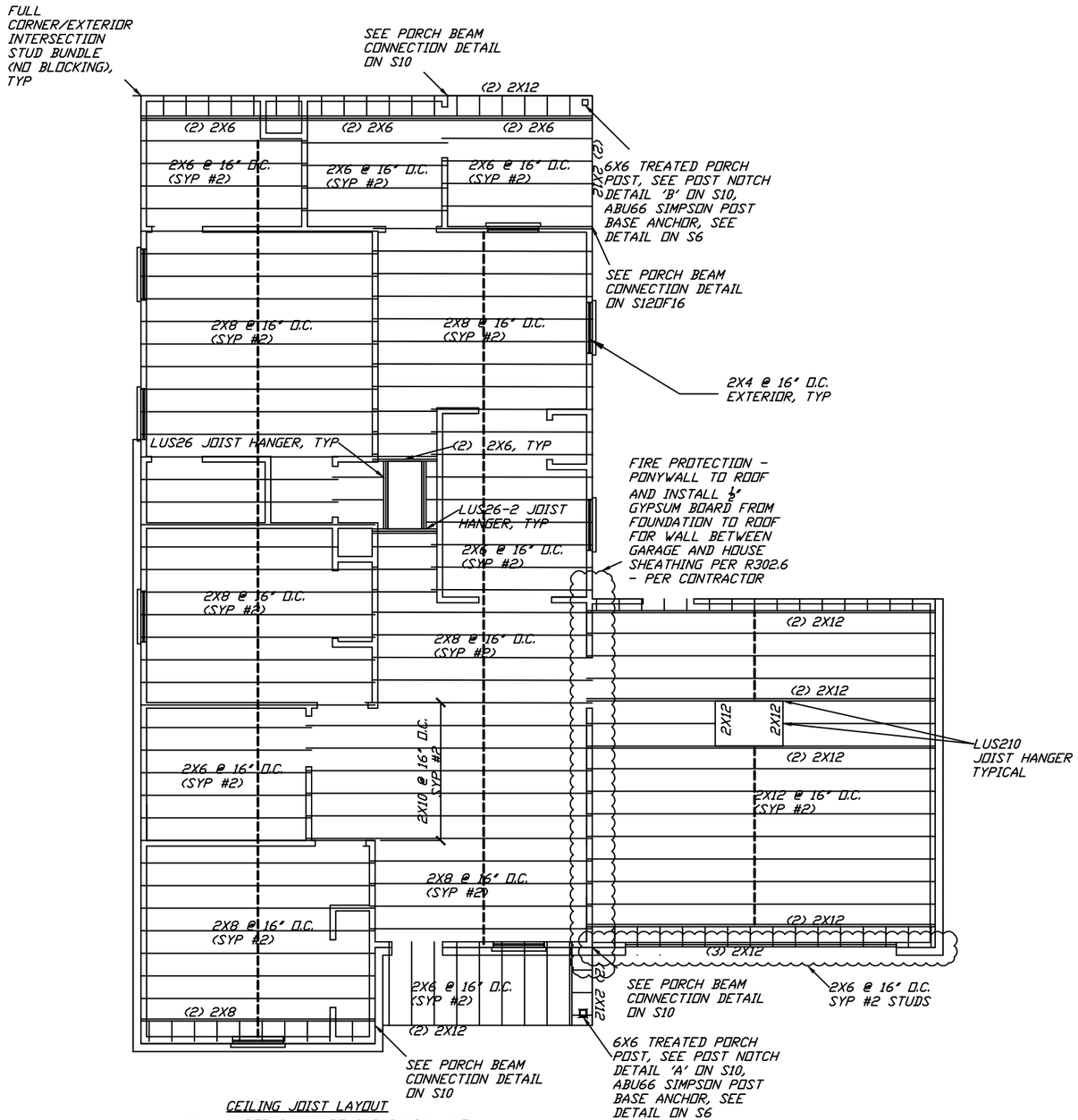
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: FOUNDATION LAYOUT

DATE: JAN. 27, 2021

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

SHEET: S1



CEILING JOIST LAYOUT

ALL LUMBER SHALL BE SYP#2 MIN., UNO
ALL EXPOSED LUMBER SHALL BE TREATED
ALL EXPOSED FASTENERS SHALL BE MIN. OF ELECTRO-GALVANIZED
2X4 @ 16" O.C. EXTERIOR WALLS, UNO ON PLANS
2X4 @ 16" O.C. INTERIOR, UNO
SEE HEADER TABLE ON S8
ALL CEILINGS TO BE PER ARCHITECTURAL DRAWINGS
SEE ARCHITECTURAL FLOOR PLAN FOR CEILING ALL HEIGHTS

------ 2X6 STRONGBACK LOCATIONS

WES BUCHHORN, PE
TIM BUCHHORN, PE

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108508
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PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

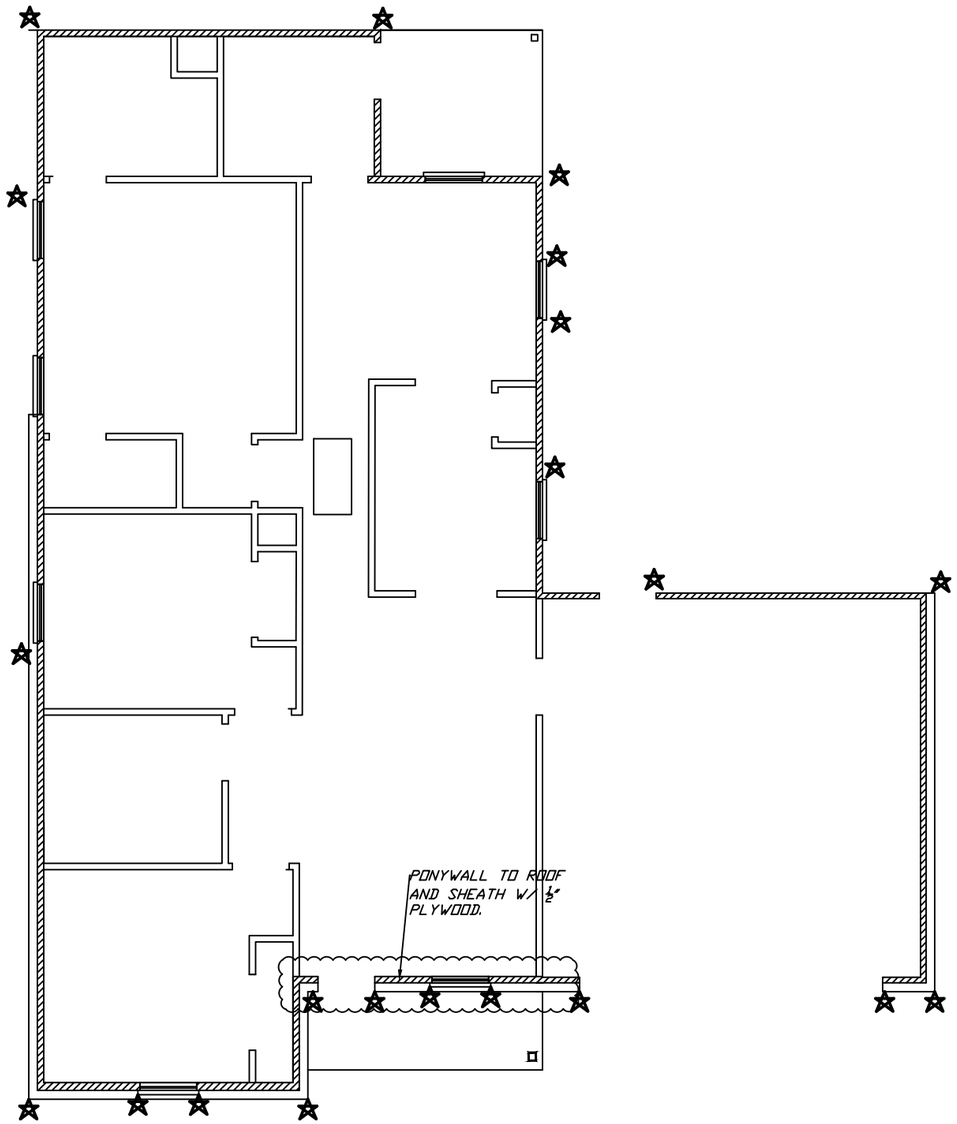
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: CEILING JOIST LAYOUT

DATE: JAN. 27, 2021

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

SHEET: S2



SHEARWALL/ HOLD DOWN LAYOUT

- ½" PLY, 4X8 NAILED W/ 10d (.131) NAILS (ONE SIDE ONLY)

- HTT5 SIMPSON HOLDOWN, SEE DETAIL ON S6

WES BUCHHORN, PE
TIM BUCHHORN, PE

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108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

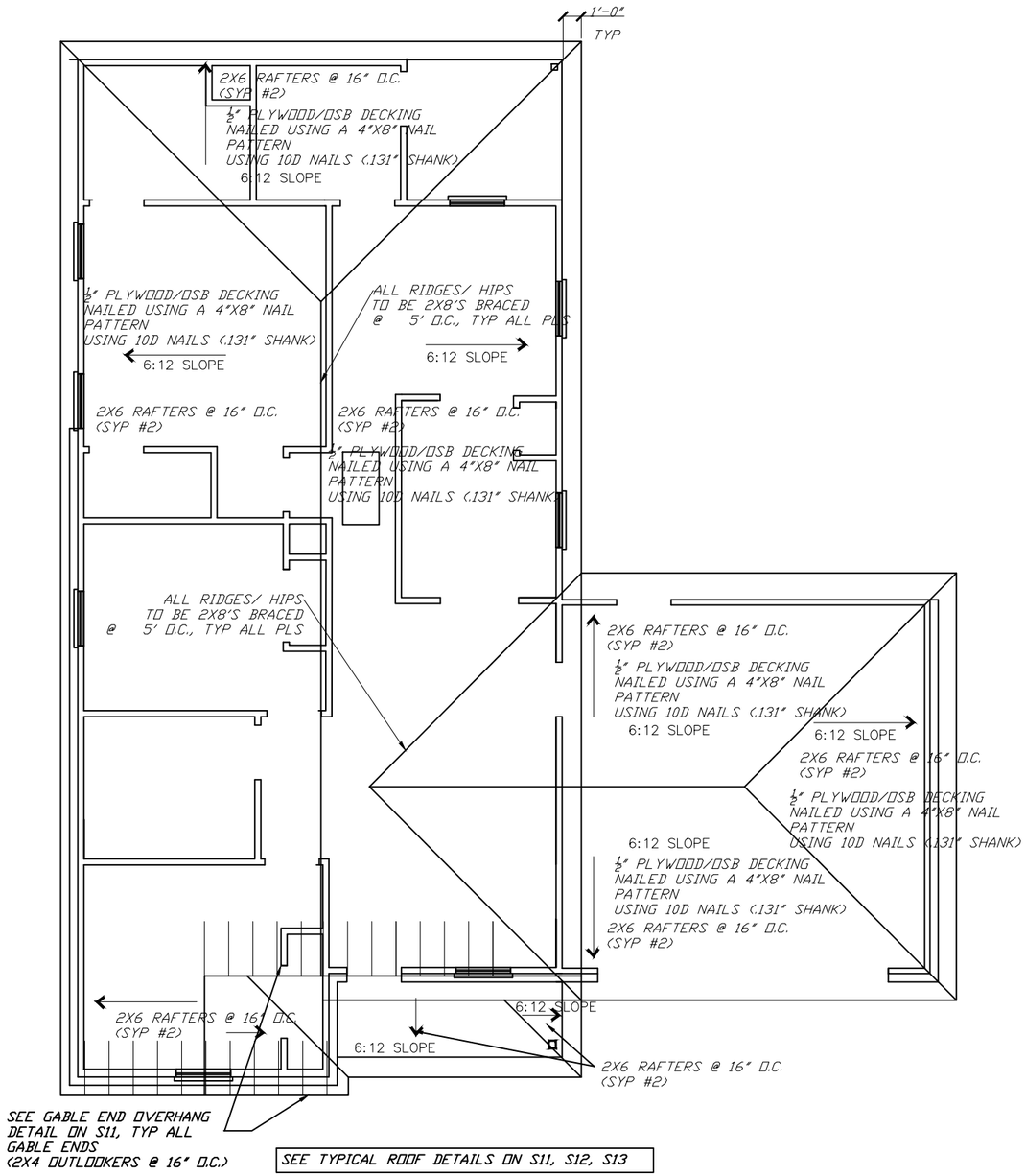
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: SHEARWALL/ HOLD DOWN LAYOUT

DATE: JAN. 27, 2021

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

SHEET: S3



SEE TYPICAL ROOF DETAILS ON S11, S12, S13

ROOF PLAN

ALL RAFTERS TO BE 2X6 @ 16" O.C. (UNO), SYP#2 MIN.,
8'-6" MAX. UNSUPPORTED SPAN, SEE PURLIN BRACE DETAIL
ALL HIP/RIDGES TO BE 2X8 (UNO), BRACED 5'-0" O.C., SEE PURLIN BRACE DETAIL
LSTA18 HIP/RIDGE STRAPS @ 16" O.C., SEE DETAIL
2X4 COLLAR TIES @ 32" O.C., SEE DETAIL
NAIL ALL CEILING JOIST TO RAFTER W/ (5) 10d COMMON GALV. NIALS, TYP
H2.5A CLIP EACH RAFTER TO TOP PLATE, SEE DETAIL
½" PLY ROOF DECK, 4X6 NAILED W/ 10d COMMON GALV. NAILS UNDER 30LB. FELT
COMPOSITION SHINGLES INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS

WES BUCHHORN, PE
TIM BUCHHORN, PE

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FIRM REGISTRATION #13882

NO.	ISSUE / REVISION	DATE
	ORIGINAL RELEASE	1-18-21
	REVISED	1-27-21

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(WES) 409-795-1415
(TIM) 409-795-1181
8017 HARBORSIDE DRIVE,
GALVESTON, TX 77554
SOUTHEASTTEXASENGINEERING.COM

ENGINEER STAMP AND SIGNATURE

STATE OF TEXAS
WESLEY ALLAN BUCHHORN
108508
LICENSED
PROFESSIONAL ENGINEER

1-27-21

NEW RESIDENCE
LEMOINE

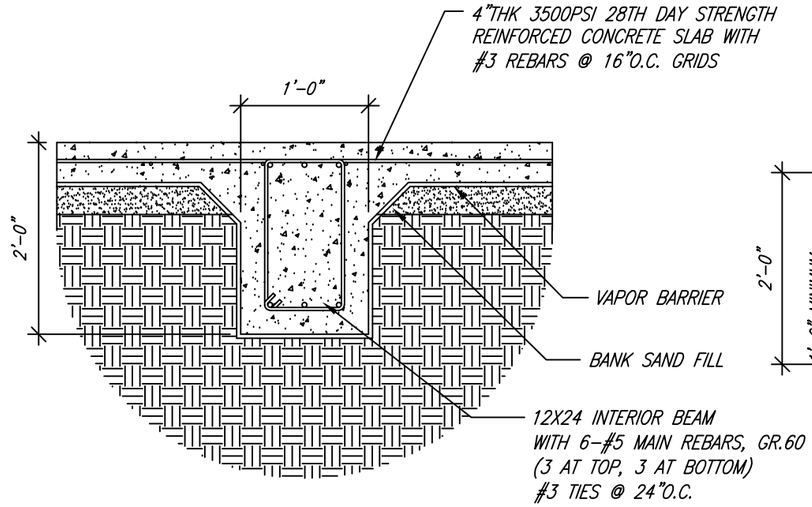
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: ROOF LAYOUT

DATE: JAN. 27, 2021

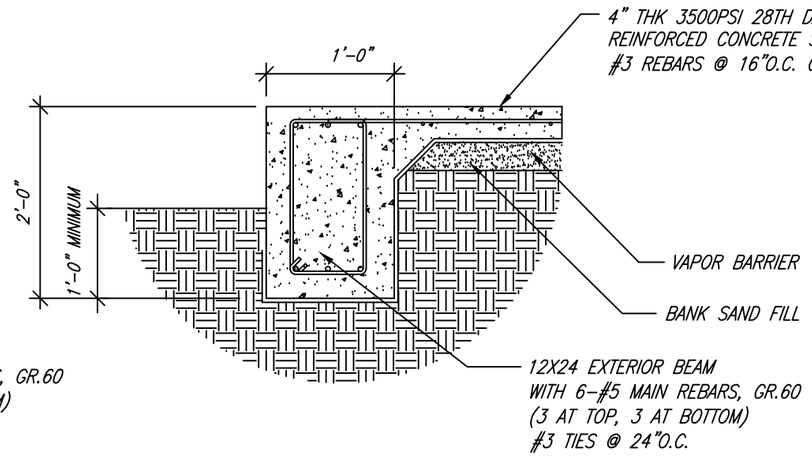
SCALE: 1/8"=1'-0"

SHEET: S4



12X24 INTERIOR BEAM

NOT DRAWN TO SCALE



12X24 EXTERIOR BEAM

NOT DRAWN TO SCALE

SPLICE OVERLAPS ARE TO BE 50 TIMES THE
DIA. OF REBAR, BUT NO LESS THAN 2'-0".
GRADE 60 REBAR
2'X2' CORNER BARS AT ALL EXTERIOR CORNERS AND INTERSECTIONS (SAME SIZE AS BEAM REBAR)
3000 PSI CONCRETE
ALL ANCHOR BOLTS TO BE F1554-50KSI
ALL OTHER BOLTS TO BE A307, UNO
ALL SILL PLATE BOLTS AND EXPOSED FASTENERS TO BE HOT-DIPPED GALVANIZED, UNO
3" MIN. CONCRETE COVERAGE FOR ALL REBAR
ALL SLOPES, DROPS, DOOR INSERTS RESPONSIBILITY OF CONTRACTOR

NOTE FOR ALL SOIL CONDITIONS

NOTE: IF BEAMS DO NOT PENETRATE 12" BELOW EXISTING GRADE, THEN THE NEW FILL SHALL BE COMPACTED TO 95% OF ITS MAX DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D 698) - COMPACT AT 8" LIFTS.

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1-27-21

NEW RESIDENCE
LEMOINE

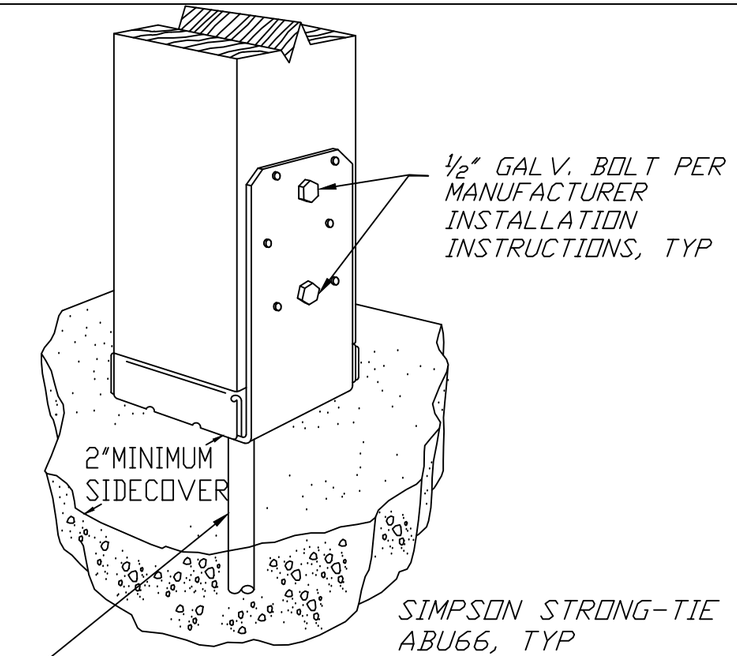
1738 RIANE LANE
HOUSTON, TEXAS

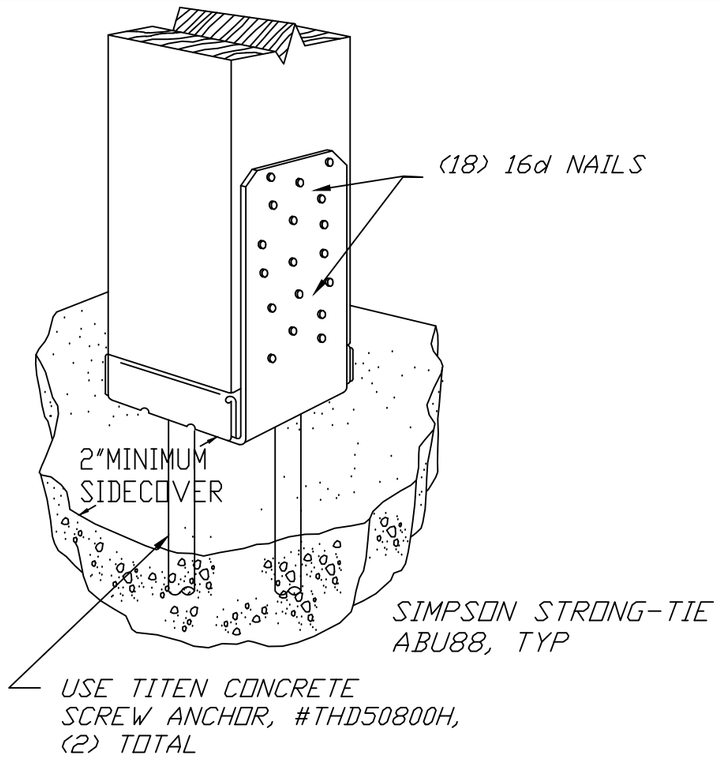
TITLE: CONCRETE BEAM DETAILS

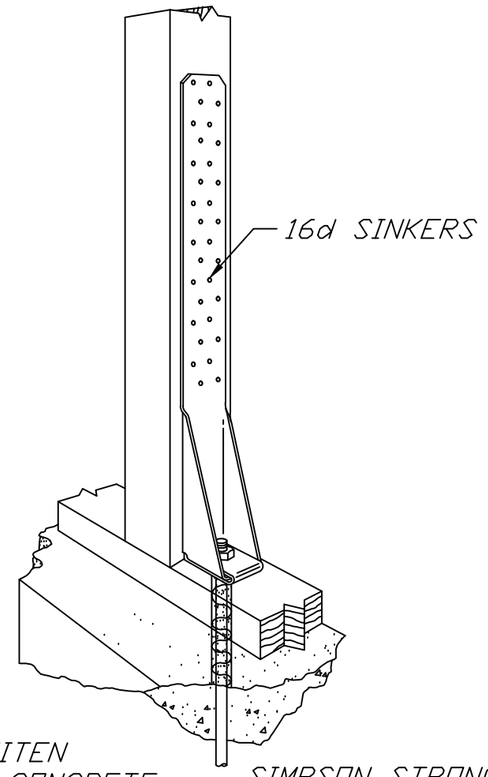
DATE: JAN. 27, 2021

SCALE: NTS

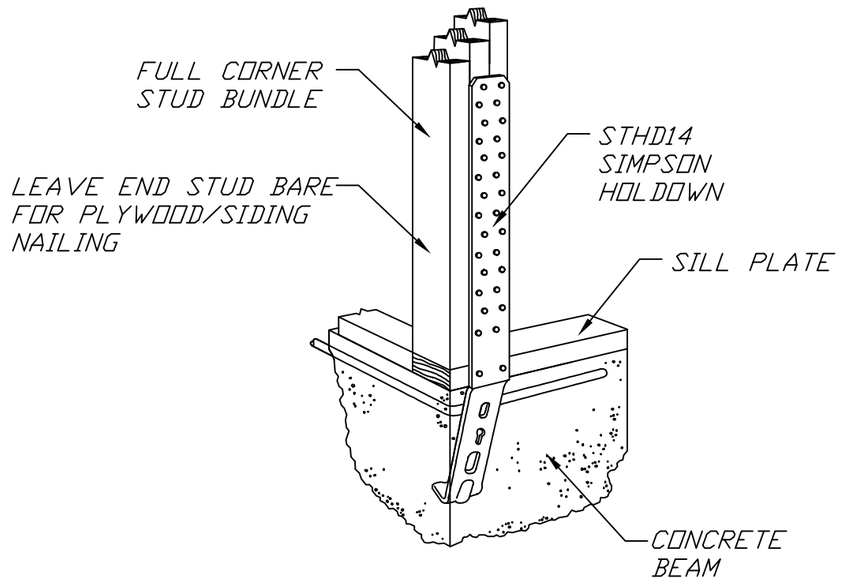
SHEET: S5







SIMPSON ANCHOR
1. THD501200H TITEN HEAVY DUTY CONCRETE BOLT



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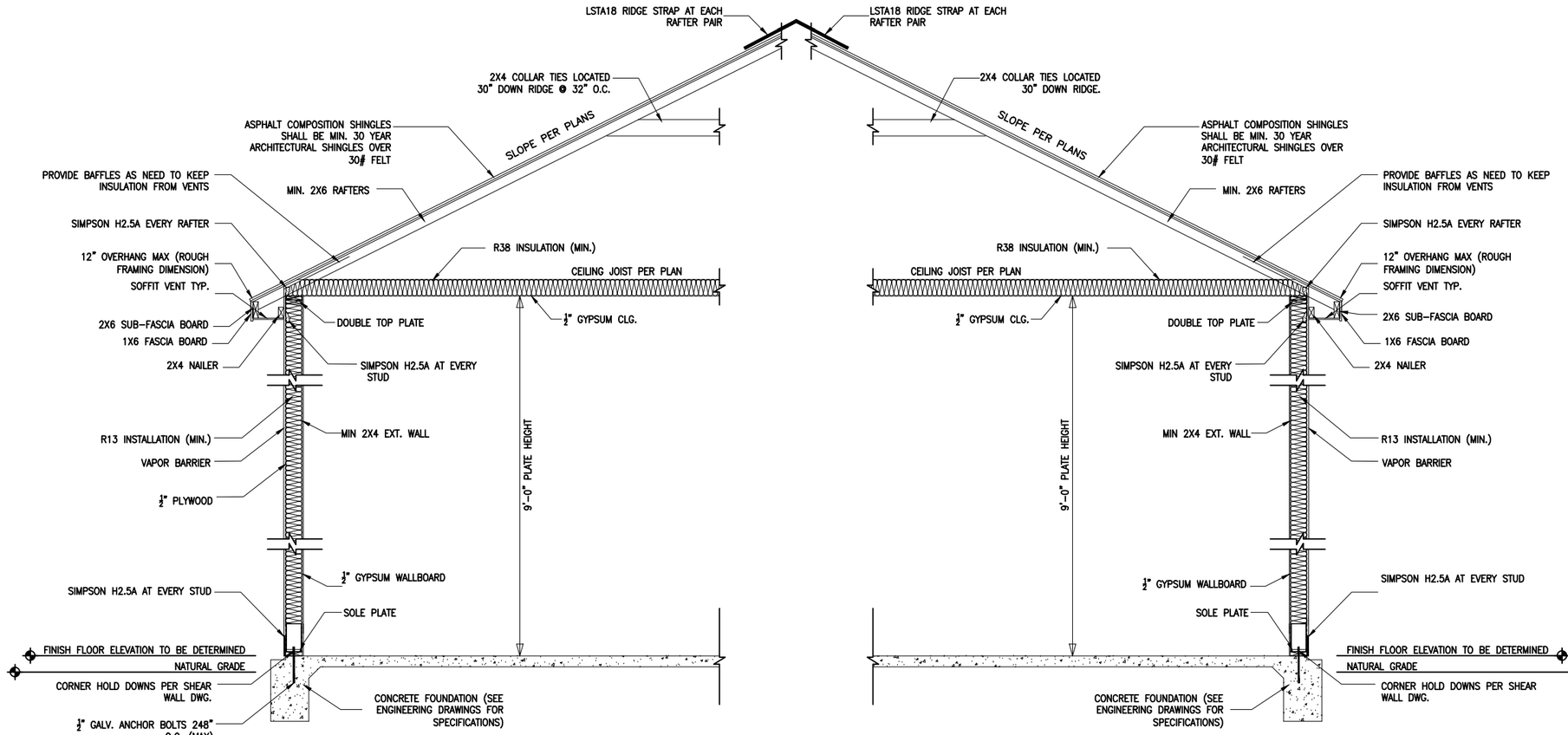
1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: CONCRETE FOUNDATION DETAILS

DATE	
JAN. 27, 2021	
SCALE: NTS	SHEET: S6



TYPICAL SECTION VIEW

WES BUCHHORN, PE
TIM BUCHHORN, PE

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1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: TYPICAL WALL DETAILS

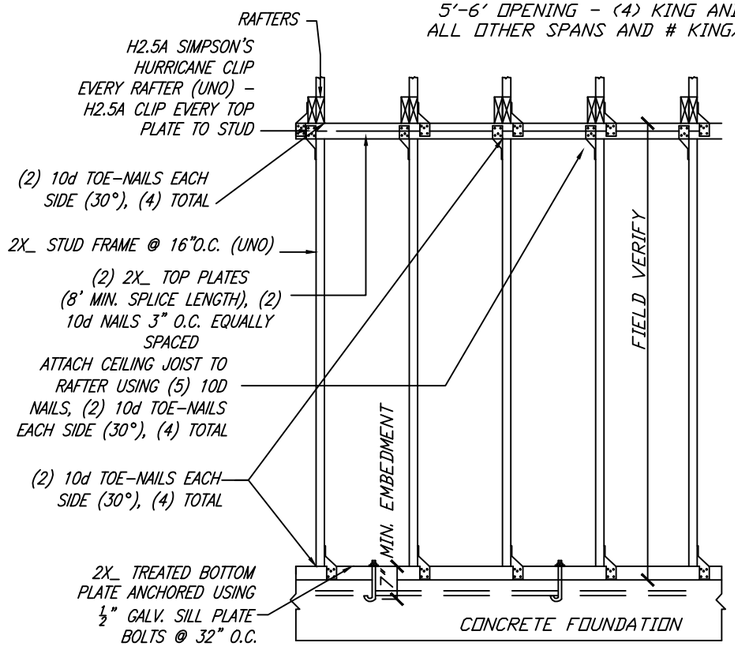
DATE: JAN. 27, 2021

SCALE: NTS

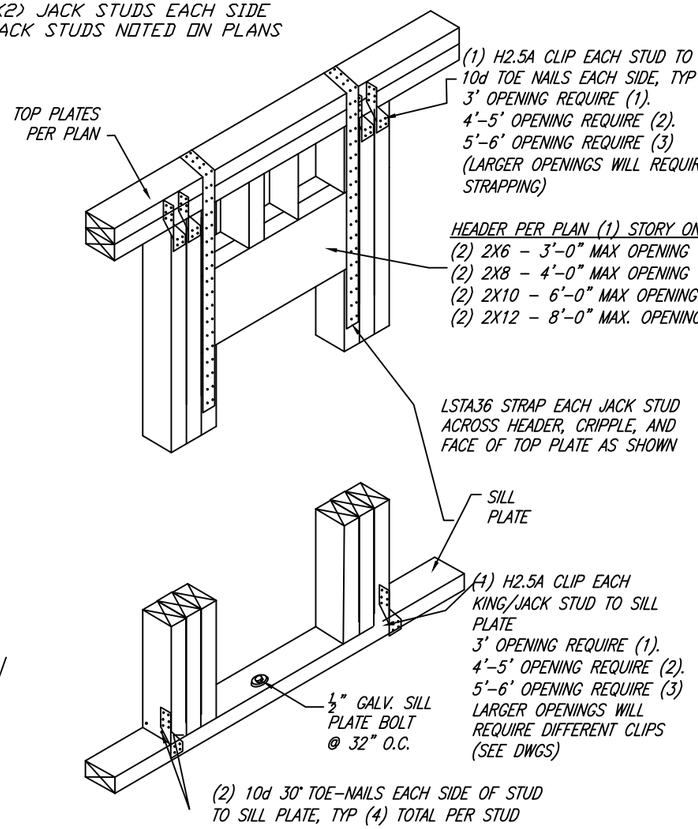
SHEET: S7

KING/JACK STUD TABLE

3' OR LESS OPENING - (1) KING AND (1) JACK EACH SIDE
3'-4' OPENING - (2) KING AND (2) JACK STUDS EACH SIDE
4'-5' OPENING - (3) KING AND (2) JACK STUDS EACH SIDE
5'-6' OPENING - (4) KING AND (2) JACK STUDS EACH SIDE
ALL OTHER SPANS AND # KING/JACK STUDS NOTED ON PLANS



TYPICAL CLIP CONSTRUCTION
DETAIL SLAB ON GRADE



WINDOW/DOOR/ OPENING CONNECTION

HTT5 HOLD DOWNS - SEE HOLD DOWN LAYOUT

WES BUCHHORN, PE
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LEMOINE

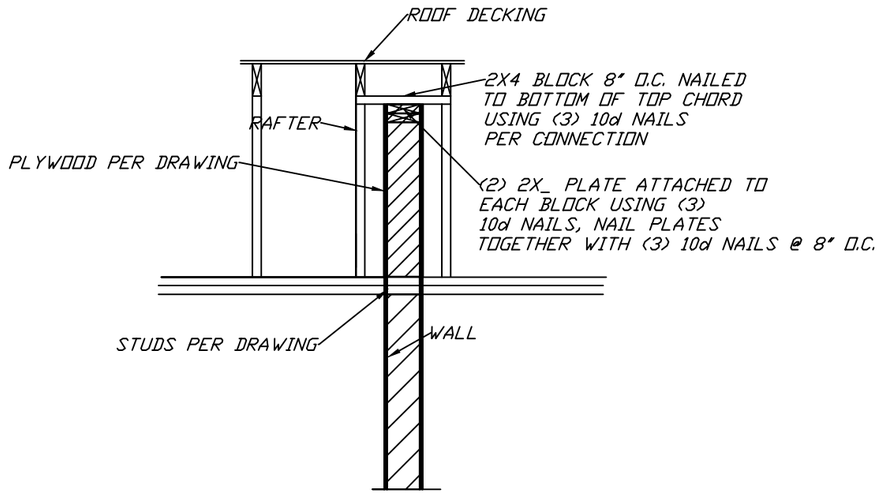
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: CLIP/STRAP DETAILS

DATE: JAN. 27, 2021

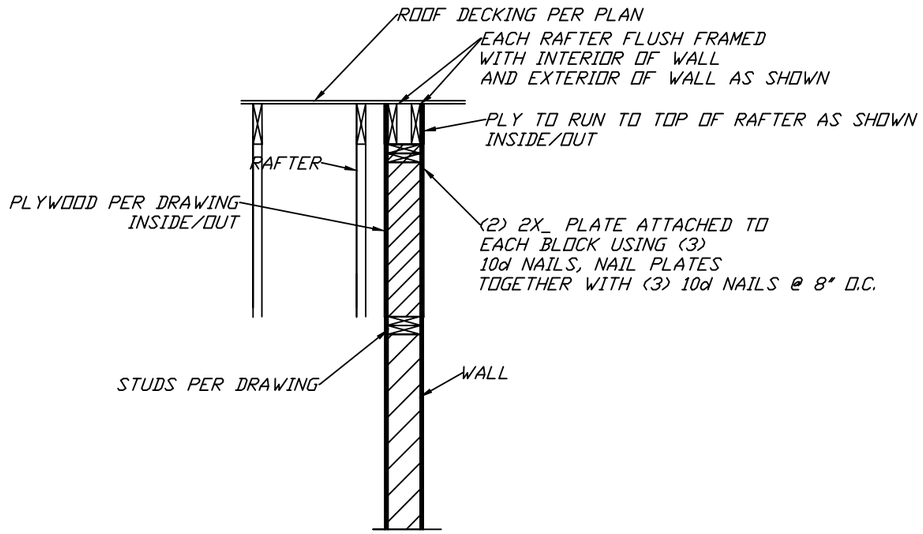
SCALE: NTS

SHEET: S8



ATTIC SHEARWALL DETAIL

(NOTE: CONSTRUCT PONYWALLS THAT RUN PERPENDICULAR W/ RAFTERS AS A TYPICAL EXTERIOR WALL - TOP PLATES, PLYWOOD, CLIPS/STRAPS, ETC.)



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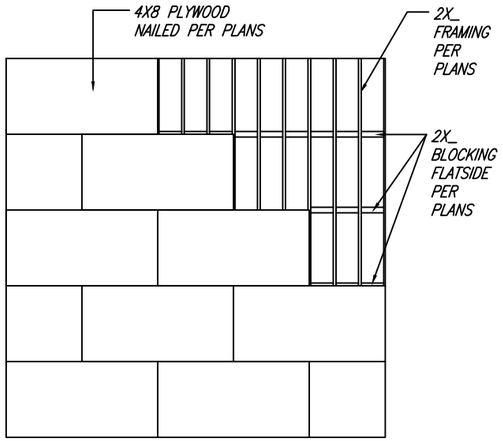
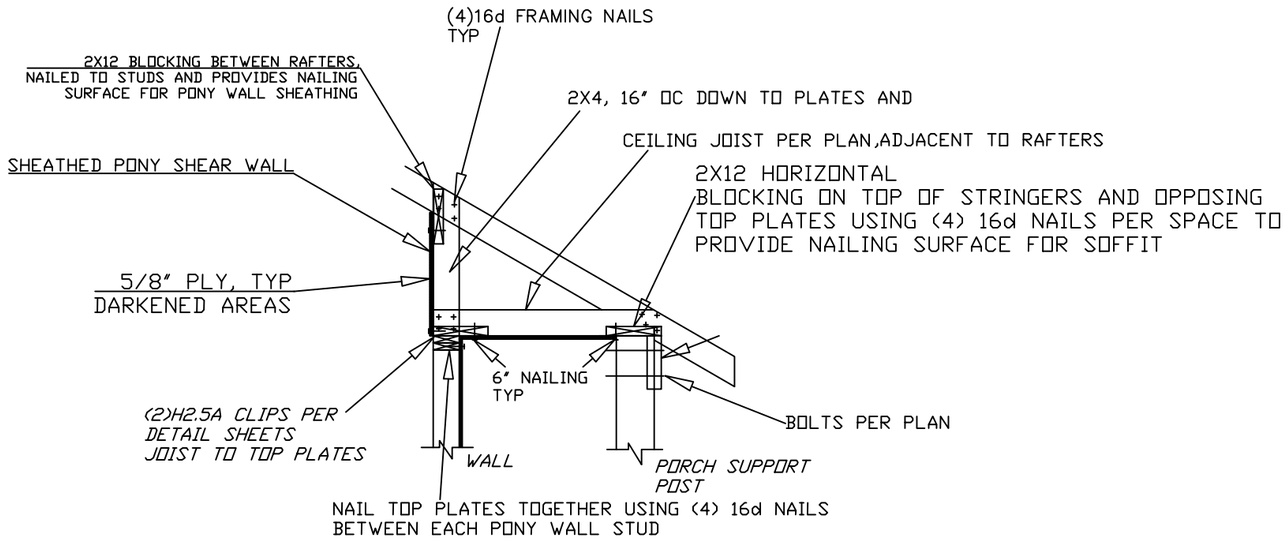
(NOTE: CONSTRUCT PONYWALLS THAT RUN PERPENDICULAR W/ RAFTERS AS A TYPICAL EXTERIOR WALL - TOP PLATES, PLYWOOD, CLIPS/STRAPS, ETC.)



TYPICAL LAYOUT FOR SHEARWALLS

4X6 NAILED W/ 10d COMMON GALV. NAILS, TYP



ATTIC SHEARWALL DETAIL

RAFTER PARALLEL W/ JOIST

ELEVATION SECTION VIEW

WES BUCHHORN, PE
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1-27-21

NEW RESIDENCE
LEMOINE

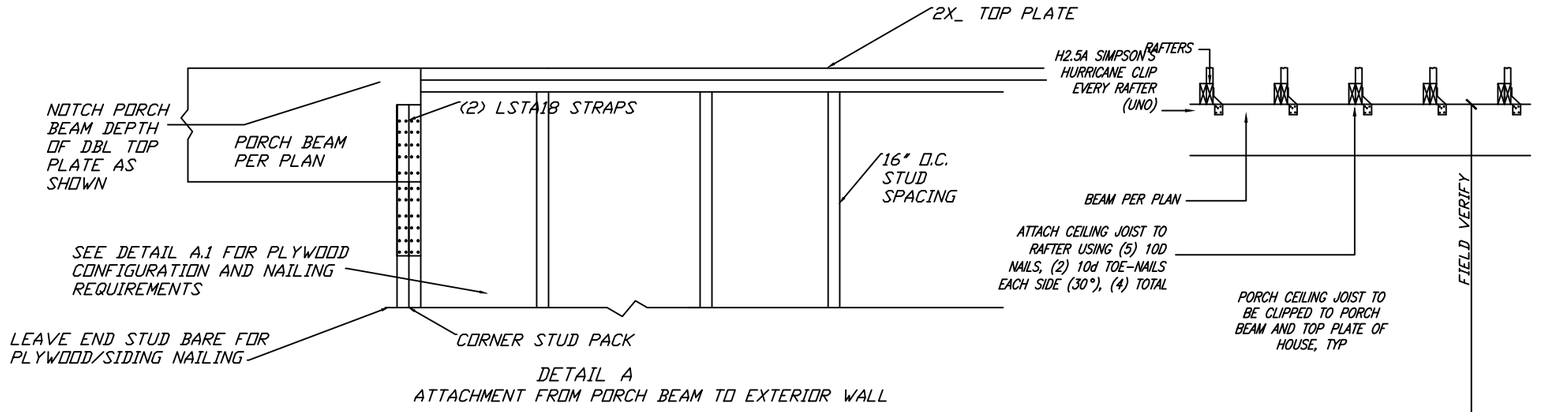
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: SHEARWALL DETAILS

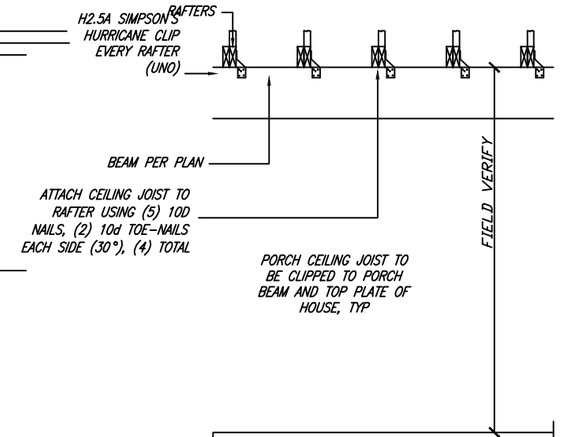
DATE: JAN. 27, 2021

SCALE: NTS

SHEET: S9

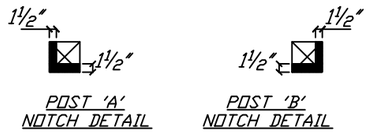


DETAIL A
ATTACHMENT FROM PORCH BEAM TO EXTERIOR WALL



TYPICAL CLIP CONSTRUCTION DETAIL
(COVERED PORCH WITH H2.5A ROOF CLIPS)

PORCH BEAM ATTACHMENT DETAILS

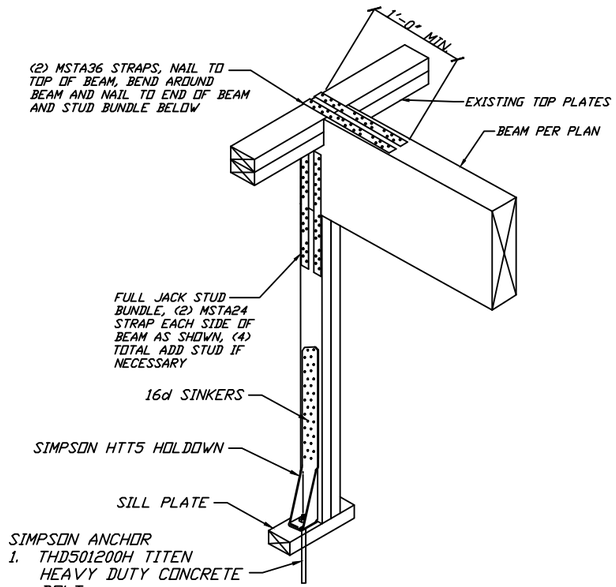


POST 'A' NOTCH DETAIL

POST 'B' NOTCH DETAIL

PORCH POST NOTCH DETAIL FOR DROP BEAM

ALL NOTCHES TO BE FULL DEPTH OF BEAM
(4) ½" GALV. BOLTS EQUALLY SPACED PER POST, DO NOT COUNTERSINK
CORNER POSTS TO HAVE (2) ½" GALV. BOLTS EQUALLY SPACED EACH DIRECTION



PORCH BEAM CONNECTION
(HOUSE SIDE)
NOT DRAWN TO SCALE

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TIM BUCHHORN, PE

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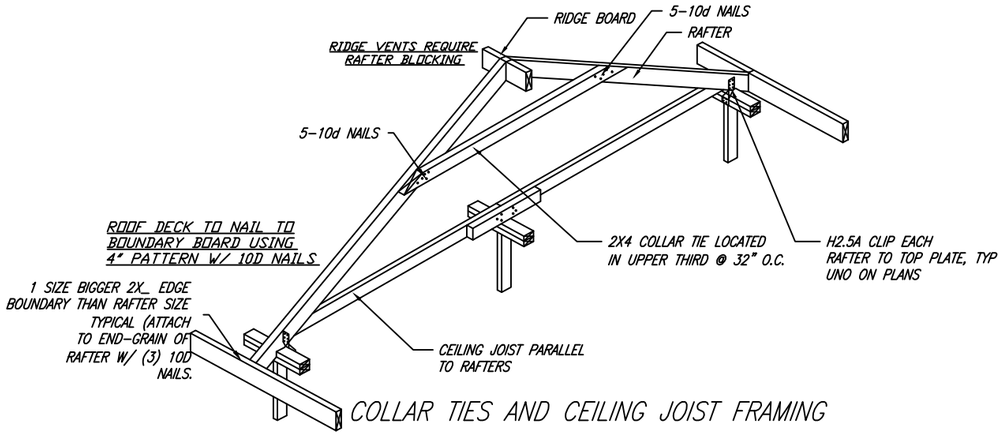
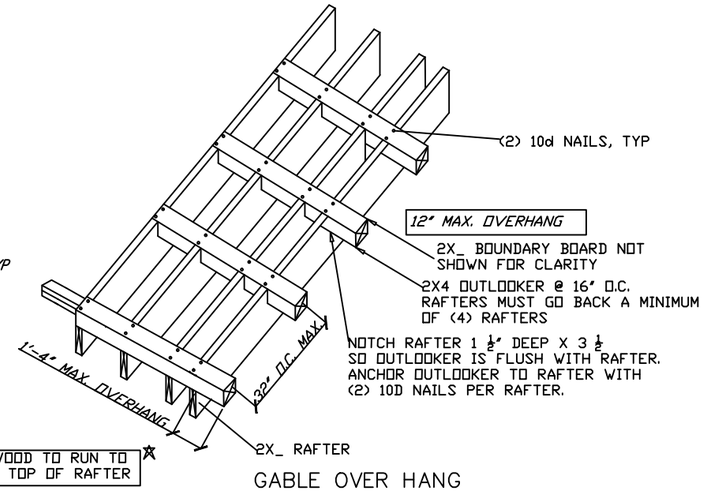
NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

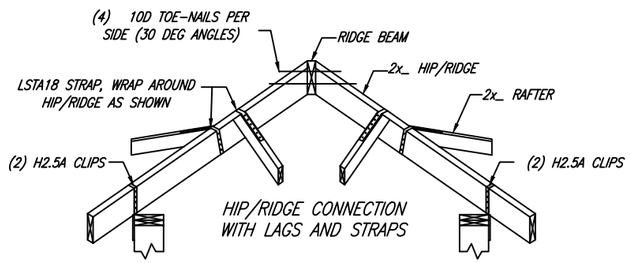
TITLE: PORCH DETAILS
DATE: JAN. 27, 2021
SCALE: NTS
SHEET: S10



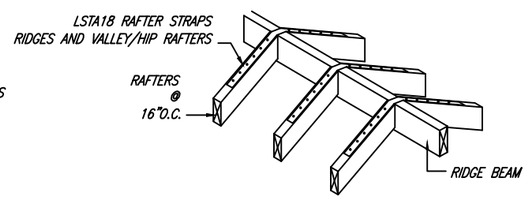
COLLAR TIES AND CEILING JOIST FRAMING



GABLE OVER HANG
(2X4 OUTLOOKERS)



HIP/RIDGE CONNECTION
WITH LAGS AND STRAPS



RIDGE BEAM
CONNECTION DETAIL

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1-27-21

NEW RESIDENCE
LEMOINE

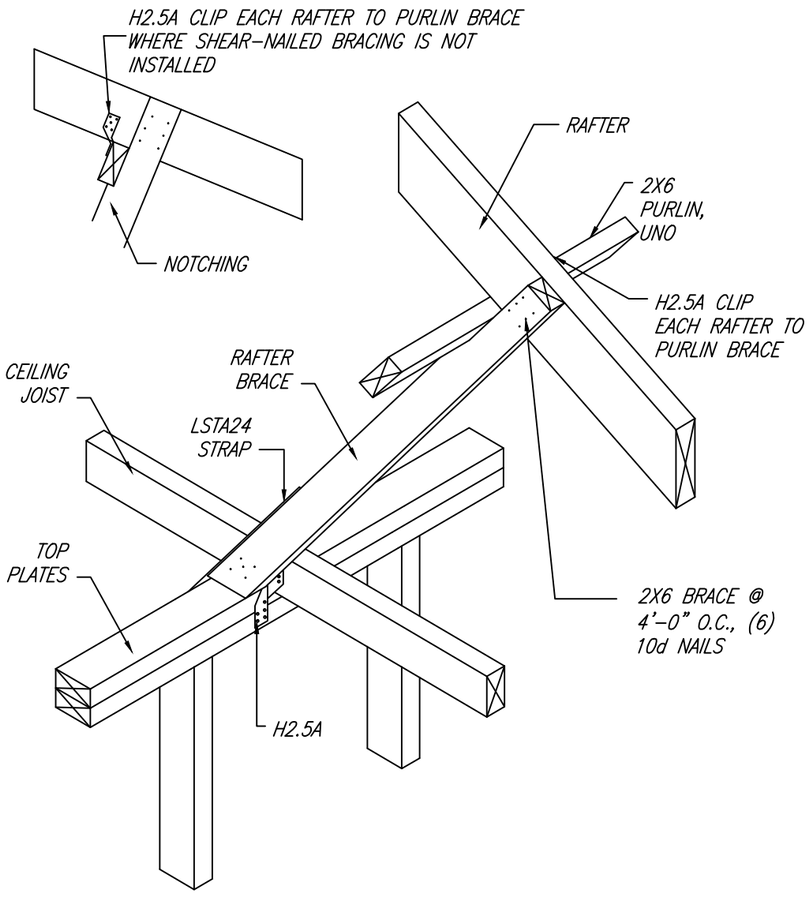
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: ROOF DETAILS1

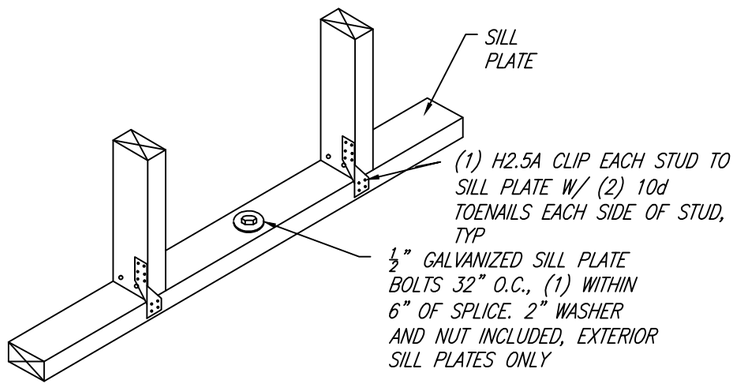
DATE: JAN. 27, 2021

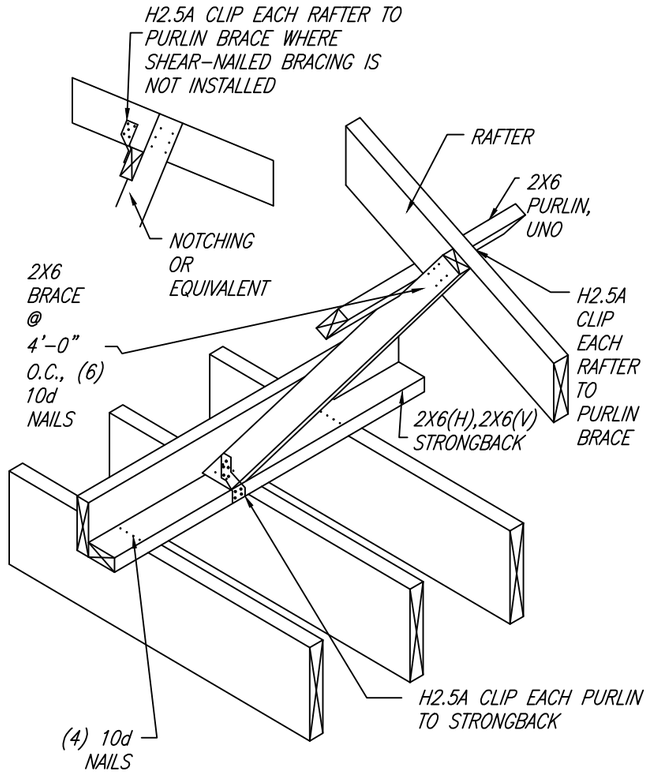
SCALE: NTS

SHEET: S11



RAFTER BRACE CONNECTION





RAFTER BRACE CONNECTION WITH STRONGBACKS

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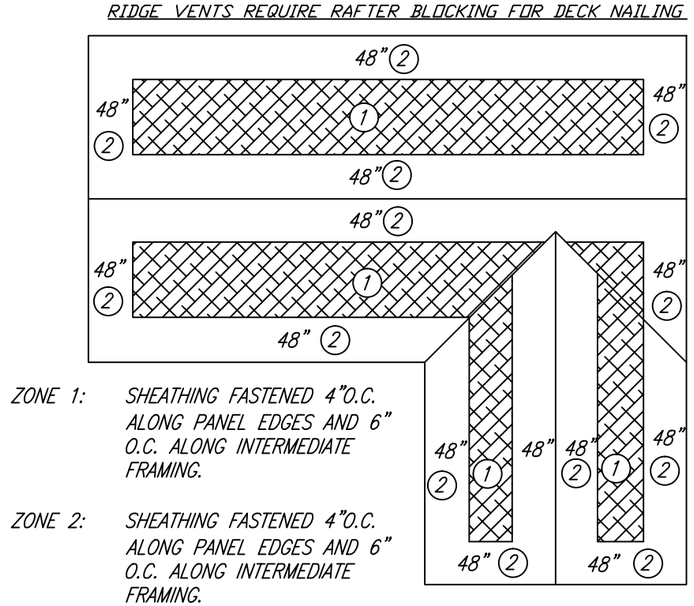
1738 RIANE LANE
HOUSTON, TEXAS

TITLE: ROOF DETAILS2

DATE: JAN. 27, 2021

SCALE: NTS

SHEET: S12

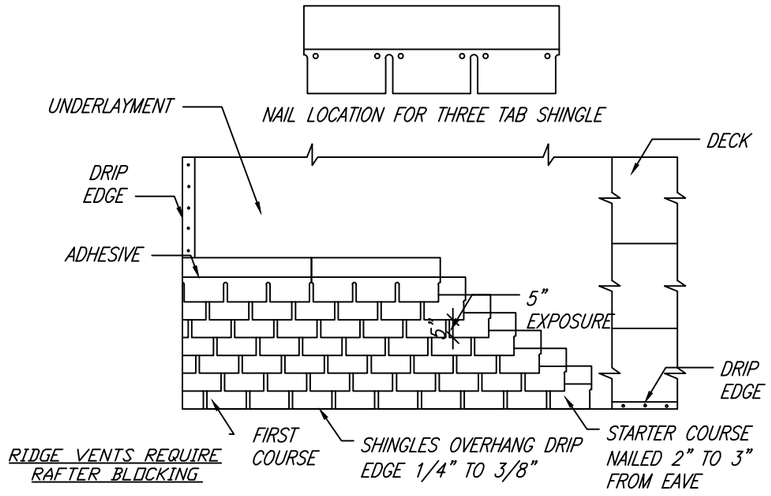


ZONE 1: SHEATHING FASTENED 4"O.C. ALONG PANEL EDGES AND 6" O.C. ALONG INTERMEDIATE FRAMING.

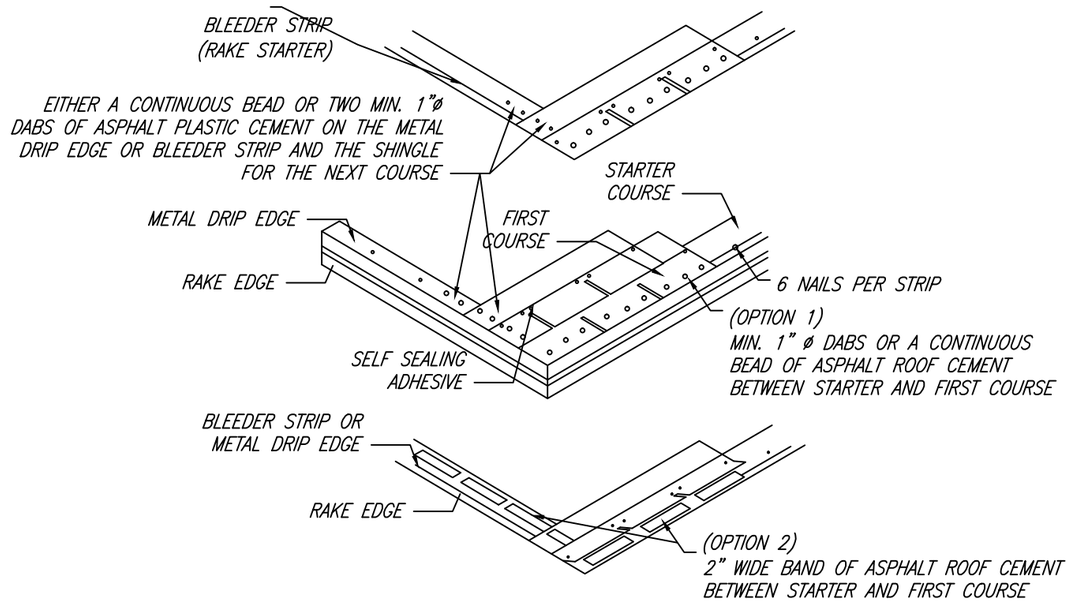
ZONE 2: SHEATHING FASTENED 4"O.C. ALONG PANEL EDGES AND 6" O.C. ALONG INTERMEDIATE FRAMING.

RIDGE VENTS REQUIRE RAFTER BLOCKING FOR DECK NAILING

ROOF SHEATHING ATTACHMENT



COMPOSITION SHINGLE APPLICATION



COMPOSITION SHINGLE APPLICATION
UNLESS NOTED OTHERWISE BY MANUFACTURER

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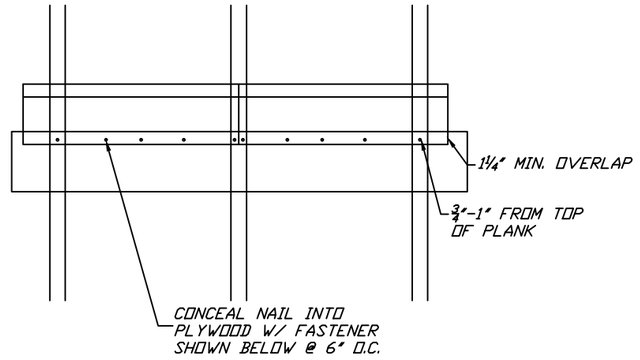
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE	ROOF DETAILS3
DATE	JAN. 27, 2021
SCALE	NTS
SHEET	S13

2X_ SYP#2 STUDS SHALL BE 16" O.C., MIN.



DETAIL FOR HARDIEPLANK 6 ¼" SIDING (CONCEAL NAIL METHOD INTO PLYWOOD)

HARDIEPLANK 6 ¼"" LAP SIDING (CONCEAL NAIL METHOD)
FASTENER: 0.090 INCH RING SHANK, 1½" LONG, 0.215 INCH HEAD

ALTERNATIVE FASTENER TO BE USED (PREFERRED):
11 GAUGE 1½" RINGSHANK ROOFING NAIL @ 6" O.C. INTO PLYWOOD SHEATHING

NOTE TO CONTRACTOR
HARDIE STARTER STRIP TO BE INSTALLED PER TDI INSTALLATION INSTRUCTIONS, REFER TO WEBSITE ON FRONT PAGE OF THIS DRAWING FOR PRODUCT EVALUATION INSTALLATION INSTRUCTIONS

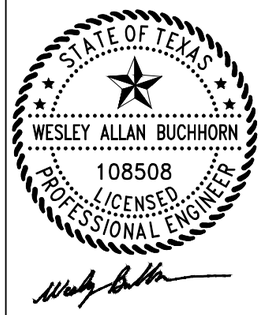
WES BUCHHORN, PE
TIM BUCHHORN, PE

FIRM REGISTRATION #13882

NO.	ISSUE / REVISION	DATE
	ORIGINAL RELEASE	1-18-21
	REVISED	1-27-21

SOUTHEAST TEXAS ENGINEERING AND INSPECTIONS, LLC
(OFFICE) 409-741-8741
(WES) 409-795-1415
(TIM) 409-795-1181
8017 HARBORSIDE DRIVE,
GALVESTON, TX 77554
SOUTHEASTTEXASENGINEERING.COM

ENGINEER STAMP AND SIGNATURE



1-27-21

NEW RESIDENCE
LEMOINE

1738 RIANE LANE
HOUSTON, TEXAS

TITLE: SIDING DETAILS

DATE: JAN. 27, 2021

SCALE: NTS

SHEET: S14