CITY OF ISLE OF PALMS, SOUTH CAROLINA REQUEST FOR BIDS (RFB) 2023-02 FEMA FMA GRANT PROJECT - ELEVATION OF PRIVATE RESIDENCE

The City of Isle of Palms is seeking bids from qualified contractors for the elevation of the existing home at 210 Forest Trail to meet the community's design flood elevation (DFE) requirements, which includes one foot of freeboard above the base flood elevation (BFE).

In addition to the modifications described above, which are detailed in the attached documentation, the contractor should include landscaping and hardscaping allowances to account for grading of the lot, drainage and repair of the existing conditions.

This request is being made and awarded pursuant to the City's procurement ordinance. The City reserves the right to reject any and all bids and to waive irregularities.

Bids should be submitted to the following:

Douglas Kerr Deputy City Administrator City of Isle of Palms 1207 Palm Boulevard Post Office Box 508 Isle of Palms, South Carolina 29451

Deadline for Questions

The deadline for questions is 5:00 p.m., Eastern Time, Friday, August 18th, 2023. Bidders should send questions regarding this Request for Bids to Douglas Kerr in writing or email to <u>dkerr@iop.net</u>. Questions received before this deadline will be answered via addendum posted on the City's website at <u>http://www.iop.net/requests-forbids-proposals</u>. Questions received after this deadline will not be answered.

If an addendum is issued, Bidders must acknowledge receipt of the addendum with their bid.

Deadline for Submissions

The deadline for submission is 10:00 a.m., Eastern Time, Friday, August 25th, 2023. Bids will be received at the front desk of the Building Department, on the first floor of 1207 Palm Boulevard, Isle of Palms, South Carolina 29451 in a sealed envelope. Sealed envelopes must be clearly marked "RFB2023-02 FEMA FMA GRANT PROJECT ELEVATION OF PRIVATE RESIDENCE" and include one (1) hard copy and one (1) electronic copy. It will be the responsibility of the bidders to verify receipt by the City.

Bids may be delivered by hand or by mail, but no bid shall be considered which is not actually received by the City at the place, date and time appointed by the City and the City shall not be responsible for any failure, misdirection, delay or error resulting from the selection by any bidder of any particular means of delivery.

Proprietary and/or Confidential Information: Your bid is a public document under the South Carolina Freedom of Information Act (FOIA), except as to information that may be treated as confidential as an exception to disclosure under the FOIA. If you cannot agree to this standard, please do not submit your bid. All information that is to be treated as confidential and/or proprietary must be CLEARLY identified, and each page containing confidential and/or proprietary information, in whole or in part, must be stamped and/or denoted as CONFIDENTIAL, in bold, in a font of at least 12-point type, in the upper right-hand corner of the page. All information not so denoted and identified will be subject to disclosure by the City.

Bidders acknowledge and agree that the City will not be liable for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the respondent or any member of the respondent's organization as a result of, or arising out of, submitting a bid, negotiating changes, or due to the City's acceptance or non-acceptance of the bid or the rejection of any and all bids. Bidders are responsible for submission of accurate, adequate and clear descriptions of the information requests. Neither issuance of the RFB, preparation and submission of a response, nor the subsequent receipt and evaluation of any response by the City of Isle of Palms will commit the City to award a contract to any respondent even if all the requirements in the RFB have been met.

Bidders must have or be able to procure an Isle of Palms Business License.

Contractors considering submission under this RFB will be expected to have read and be prepared to enter into the attached contract, which is a part of this RFB. The City of Isle of Palms reserves the right to accept or reject any and all bids, or any parts thereof; to waive irregularities or informalities in any bid received to allow the bid to be considered; to negotiate terms and conditions with Bidders; and to select a Bidder or to cancel in whole or in part this RFB, if it is in the best interest of the City to do so. Those bids determined not to be in compliance with provisions of this RFB and the applicable laws and or regulations will not be processed.

By signing its bid, Bidder certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agrees to provide the City upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable both to Bidder and its subcontractors or sub-subcontractors; or (b) that Bidder and its subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any

false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony and, upon conviction, must be fined within the discretion of the court orimprisoned for not more than five years, or both." Bidder agrees to include in any contracts with its subcontractors language requiring its subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14 and (b) include in their contracts with subcontractors, language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14.

Scope of Work

A site visit to the project site is required prior to submitting a bid as the condition of the existing structure must be evaluated as part of the work.

The scope of work for the project includes, but is not limited to the following:

- 1. All work detailed on the attached plans stamped by a licensed engineer based on geotechnical, topographical & elevation surveys to be provided by property owner and then approved by municipal building official.
- 2. The foundation is a combination of slab-on grade, elevated slab, and crawlspace (concrete block piers). Licensed contractors will remove brick veneer, reinforce structural/exterior walls as needed, and carefully demo specific areas to properly support and lift the structure. Areas of the home attached to slab will be detached from the slab and braced for elevation.
- 3. Disconnect utilities prior to elevation.
- 4. Implement damage mitigation measures to protect existing home from weather & construction damage (waterproofing, plastic, floor protection, climate control, etc).
- 5. During elevation, the home will be shifted around a large oak tree which prohibits direct vertical elevation. This large oak tree is at the corner of the home and the main trunk extends OVER the house making it physically impossible to go straight up with the elevation and removal of a live oak with DBH of 16" or greater is prohibited by Isle of Palms ordinance Sec. 5-4-64.
- Tree protection plans will be implemented as required by local ordinance Sec. 5-4-68. Placement of the home will comply with all local ordinances for setbacks and lot coverage.
- 7. Once the home is disconnected from the foundation, the house mover will shift the home away from the tree and elevate the structure at the foundation site.
- Construct a new concrete block foundation designed to elevate the lowest finished floor to approx.17' above MSL, which is approximately 10' above proposed grade and 4' above the current DFE of 13 feet (13' BFE + 1' freeboard).
- 9. Once the home is elevated, a new interior floor system will be constructed in the areas where the slab was removed.
- 10. Lower the structure onto the new foundation and reconnect using seismic attachments as recommended by engineering.

- 11. Reconnect utilities, plumbing, electrical, and mechanical systems.
- 12. Install exterior siding, trim. Caulk & paint.
- 13. Construct front and rear stairs, landings, and railings for access.
- 14. Repair / replace any interior surfaces such as flooring, drywall, trim and paint with like-kind materials in damaged / work areas.
- 15. Grade and repair lawn, landscaping, sidewalk and driveway.
- 16. Final punch list and close out.

All repairs and requirements to bring the entire structure into compliance with the 2021 IRC codes, City of Isle of Palms Building Code, Flood ordinances and FEMA rules and regulations will be completed. The elevation will be designed in accordance with ASCE 24.

The chosen contractor shall provide all materials, equipment, supplies, freight, statesales tax, labor and supervision as necessary.

Time is of the essence for this project and all bids must include a proposed timeline for commencement and completion of the project.

Bid Format

In responding to this request, contractors should provide a price quote for the scope of work to accomplish this work on the attached "BID FORM". Contractors should also provide a cost breakdown of the scope of work on the "ITEMIZED COST" form.

If any addenda(um) are issued, the contractor must acknowledge reviewing the addenda(um) by listing them on the BID FORM.

In addition to submitting the completed BID FORM, contractors submitting bids should provide examples of experience with similar projects. Provide a brief description of similar projects of comparable size and complexity for which the Bidder provided services within the past five (5) years. Limit information to no more than five (5) projects.

A performance bond for 100% of the construction contract amount will be required.

All such descriptions should include:

- 1. Project location.
- 2. Renovation and/or Replacement.
- 3. Description of original project budget versus actual cost.
- 4. Name and contact information for a reference with knowledge of the Bidder's work on the specified project.

Provide the Contractor(s) and if possible the names and bids of all sub-consultants that will be part of the Bidder's Team and identify the specific work the sub-consultant will perform. Once the City issues a contract, no change in sub-contractors assigned to the project will be permitted without prior written approval from the City.

Evaluation Criteria

The City will evaluate bids based on the factors outlined within this RFB and the City's procurement ordinance, which shall be applied to all eligible, responsive bids in selecting the successful contractor. The City reserves the right to disqualify any bid from a bidder it deems as non-responsive and/or non-responsible. The City reserves the right to make such investigations of the Bidders as it deems appropriate.

Award of any contract may be made without discussion with Bidders after bids are received. The City reserves the right to cease contract negotiations if it is determined that the Bidder cannot perform the services specified in their response.

Recommendation of award for contract will be made based not only on price, which is an important factor, but also on quality of bid, qualifications, experience, technical expertise, references, and ability to execute the work. After careful evaluation, the PublicWorks Committee will make a recommendation to City Council for award of a contract

BID FORM

BID OF:	
	(Contractor)
BID TO:	The City of Isle of Palms (Owner)
PROJECT NAME:	FEMA FMA Grant Project – Elevation of a Private Residence
PROJECT NUMBER:	RFB 2023-02
BID DATE:	

BASE BID AGREEMENT

The undersigned, having examined all the Bidding Documents, including all Addendum(a) as follows:

Shall execute the entire Work in the Bidding Documents described as the Base Bid for he lump sum of:

Dollars (\$) which sum is hereafter called the <u>BASE</u>
BID.	

ITEMIZED COSTS (sum of each item should total BASE BID amount)

	<u>Cost</u>
1. House Moving and Elevation:	
2. Demolition:	
3. Concrete footings, block, and slab:	
4. Framing and siding:	
5. Mechanical and insulation:	
6. Lattice panels, porches, and stairs:	
7. Floors, trim, and paint:	
8. Landscaping and hardscaping repairs:	
9. Contractor profit and overhead:	
10. Landscaping and hardscaping repairs:	
11.Contingency:	

TOTAL BASE BID:

DATE FOR COMMENCEMENT AND SUBSTANTIAL COMPLETION

The <u>Date for Commencement</u> shall be established in the <u>Notice to Proceed</u>. The Contractor shall not incur any expense until the contract has been awarded. An award requires that either the <u>Contract</u> be signed by both the awarding authority and the contractor or a <u>Notice to Proceed</u> is executed.

All work shall be substantially completed (as evidenced by the date on the <u>CERTIFICATE</u> <u>OF SUBSTANTIAL COMPLETION</u>) within the timeframe set forth in the <u>NOTICE TO</u> <u>PROCEED</u>, subject to adjustments asprovided in the Contract Documents.

Final completion of all work shall be performed within: <u>THIRTY</u> (30) calendar days from the scheduled contract time for substantial completion, subject to adjustments as provided in the Contract Documents.

The undersigned further agrees that from the compensation to be paid, the owner may retain as liquidated damages the sum of <u>two hundred and fifty</u> dollars (\$250) for each calendar day the actual contract time for Substantial Completion for the project exceeds the specified or adjusted contract time for Substantial Completion as provided in the Contract Documents.

THIS AGREEMENT IS SUBJECT TO BINDING ARBITRATION PURSUANT TO SOUTH CAROLINA CODE SECTION 15-48-10, ET SEQ., AS AMENDED

STATE OF SOUTH CAROLINA)	RFB	FMA Elevation Project
)		
COUNTY OF CHARLESTON)		

WHEREAS, Contractor was the successful bidder under the City's solicitation for bids for the Bulkhead Alteration; and

WHEREAS, the parties hereto desire to enter into this Agreement to set forth the exact rights, duties and obligations of each party regarding the services to be performed by Contractor pursuant to the bid.

THEREFORE, in consideration of the mutual covenants and promises set forth herein,

City and Contractor agree as follows:

1. SCOPE OF WORK.

A. Contractor agrees to provide all labor, equipment, tools, materials, supplies, and incidentals necessary for the FMA Elevation project, pursuant to the published Request for Bid documents (RFB ______) and the bid submitted by Contractor to City dated _______, 2023 (the "Bid"), copies of which are attached hereto as "Exhibit 1"and "Exhibit 2" and made a part of this Agreement by reference thereto. In the event of any conflict between the provisions of this Agreement and the Solicitation, the term of this Agreement shall control.

B. Contractor agrees to use its best skill and attention and be solely responsible for all means, methods, techniques, sequences, and procedures in the performance of the work on the Project. Contractor hereby warrants to City that all work on the Project shall be performed in a good and workmanlike manner. Contractor agrees to comply with all applicable federal, state and local laws, rules and regulations regarding all work performed by Contractor pursuant to this Agreement.

2. CONTRACT PRICE. For all work under this Agreement, City agrees to pay to

Contractor the sum of ______ (\$____) Dollars,payable upon monthly invoices of work in place and materials on site for the Project.

3. CHANGE ORDERS. The City has the right to require alterations or changes ("Change Orders") to the Project and in such case Contractor agrees to make such alterations or changes; provided, however, that the details and additional cost or credit of such Change Order must be agreed to by the City and Contractor in writing prior to the commencement of the Change Order.

4. COMPLETION SCHEDULE. TIME IS OF THE ESSENCE. Contractor agrees to complete the Project within ______ (__) days from the date of this Agreement. Provided, however, that if performance by the Contractor is delayed for reasons or causes beyond the control of Contractor (including but not limited to, acts of God, weather conditions, site conditions, labor or material shortages, delays caused by City, and casualty losses) the Project completion date shall be extended accordingly.

5. INSURANCE. Contractor agrees to maintain comprehensive general liability insurance coverage on the work under the Project in an amount not less than \$1,000,000.00 per person, \$2,000,000.00 per claim, and \$250,000.00 per claim for property damage. Contractor also agrees to maintain worker's compensation coverage on its employees as required by the State of South Carolina workers' compensation laws. All insurance coverage required hereunder shall be with companies approved in advance by City, who shall be named as an additional insured on all such policies. Proof of such insurance shall be provided to City prior to commencement of any work by Contractor.

6. PERMITS, FEES AND LICENSES. Contractor agrees to apply for, obtain and pay for all permits, fees, licenses and inspections by governmental agencies necessary for the Contractor's proper performance and completion of the Project, including, but not limited to, a City business license.

7. INDEMNIFICATION. Contractor agrees to hold harmless and indemnify City and its officers, agents and employees from and against any loss or damage, including all reasonable attorney's fees and expenses, incurred as a result of any and all claims, demands, causes of action, suits, judgments, fines or penalties (including but not limited to all fees and expenses incurred as a result of death or injury to persons or for loss of or damage to property) arising out of or in connection with Contractor's performance of the work under this Agreement.

8. SITE INVESTIGATION. Contractor acknowledges that Contractor has had the opportunity to inspect the service areas, has determined the nature of the work and the difficulties and facilities attending performance of the work, and all other matters which Contractor contemplates may in any way affect the work under this Agreement.

9. BINDING ARBITRATION. Any dispute or controversy arising under or in connection with this Agreement shall be submitted to binding arbitration in accordance with the requirements of the South Carolina Uniform Arbitration Act as then in effect ("SCUAA"). All arbitration proceedings shall be conducted in Charleston County, South Carolina. The arbitrators shall be selected as provided in the SCUAA, and the arbitrators shall render a decision on any dispute within ninety (90) days after the last of the arbitrators has been selected. If any party to this Agreement fails to select an arbitrator with regard to any dispute submitted to Arbitration under this Section within thirty (30) days after receiving notice of the submission to arbitration of such dispute, then the other party or parties shall select an arbitrator for such nonselecting party, and the decision of the arbitrators shall be final and binding upon all the parties to the dispute, their personal representatives, legal representatives, heirs, successors and assigns. The prevailing party in any such proceeding shall be entitled to reimbursement by the losing party, in addition to any damages awarded, for all reasonable costs and expenses, including attorney's fees, incurred in any such proceeding, including all trial and appellate levels. Nothing contained in this Section shall preclude either party from seeking injunctive relief through a court of competent jurisdiction in connection with the Arbitration, and the prevailing party shall also be entitled to reimbursement by the losing party for all reasonable fees and costs, including attorney's fees, incurred in the proceedings seeking injunctive relief.

10. BREACH.

A. In the event that either party breaches any provision of this Agreement, and the same continues for a period of seven (7) days after receipt of written notice thereof, then the nonbreaching party may exercise any and all remedies at law or in equity regarding the breach of this Agreement. Without prejudice to any other rights or remedies available for the said breach, the non-breaching party may terminate this Agreement and cease further performance under this Agreement.

B. Unless authorized by this Agreement, if the Contractor completely ceases work on the Project for a period of fifteen (15) days or defaults or persistently fails or neglects to carry out the Project, the City may, after seven (7) days' written notice to the Contractor, complete the Project and if such expense exceeds the unpaid balance, the Contractor shall pay the difference to the City.

11. EFFECT OF WAIVER OR CONSENT. A waiver or consent, express or implied, to or of any breach or default by a party in the performance of its obligations under this Agreement is not a consent or waiver to or of any other breach or default in the performance by that party of the same or any other obligations of that party with respect

to this Agreement. Failure on the part of a party to complain of any act of the other party or to declare a party in default with respect to this Agreement, irrespective of how long that failure continues, does not constitute a waiver by that party of its rights with respect to that default until the applicable statute-of-limitation period has run.

12. SUB-CONTRACT OR ASSIGNMENT. Contractor agrees not to enter into any subcontracts or assignments pertaining to the performance of all or any part of this Agreement, either voluntarily or by operation of law, without prior written approval of City.

13. BINDING AGREEMENT. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

14. GOVERNING LAW; SEVERABILITY. This Agreement is governed by and shall be construed and interpreted in accordance with the laws of the State of South Carolina. If any provision of this Agreement is held invalid or unenforceable to any extent by a court of competent jurisdiction, the remainder of this Agreement is not affected thereby and that provision shall be enforced to the greatest extent permitted by law.

15. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties hereto relating to the subject matter hereof, and supersedes and nullifies all prior or contemporaneous contracts, agreements, understandings or representations, whether oral or written, which are not expressly stated in this agreement. Neither party is relying upon any representation not expressly contained herein. This Agreement may be amended and modified from time to time only upon the written mutual consent of City and Contractor.

16. SECTION HEADINGS. The headings of Sections or paragraphs used in this Agreement have been inserted for convenience only and are not to be used in determining the contents contained herein.

IN WITNESS WHEREOF, the City and Contractor have hereunto set their hands and seals, by and through the undersigned officers, as of the day and year first above written.

WITNESS:	Contractor:
(#1 as to Contractor)	
	Ву:
(#2 as to Contractor)	Title:
	The City of Isle of Palms, S.C.:
(#1 as to City)	
	Ву:
(#2 as to City)	Title:



CONSULTANTS

HOME DESIGN

AARON EDE STUDIO, LLC Aaron Ede 754 Kit Hall Road McClellanville, SC 29458 (843) 442-0173

LANDSCAPE ARCHITECT

JODY FURMAN RLA 1207 Merganser Ct. Mount Pleasant, SC 29464 (843) 343-1320 furmanrla@gmail.com

STRUCTURAL ENGINEER

MATT KOSSOUFF PE, LLC Three Rivers Design, LLC (843) 749-3694 matthew.kassouf@threeriversdesignllc.com 210 FOREST TRAIL ISLE OF PALMS , SC

FRONT LEFT PERSPECTIVE

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- AC-1.0 Cover Sheet
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S STRUCTURAL



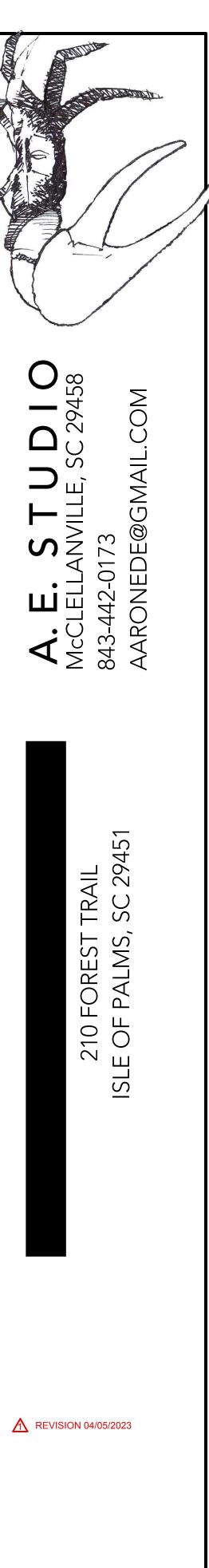
CODE CLASSIFICATION

City of Isle of Palms 302 Heated Square Feet

Group SR 1, Single Family Residential Type VI Construction 2009 IRC 2018 IECC

Max. Bldg. Height; 40'

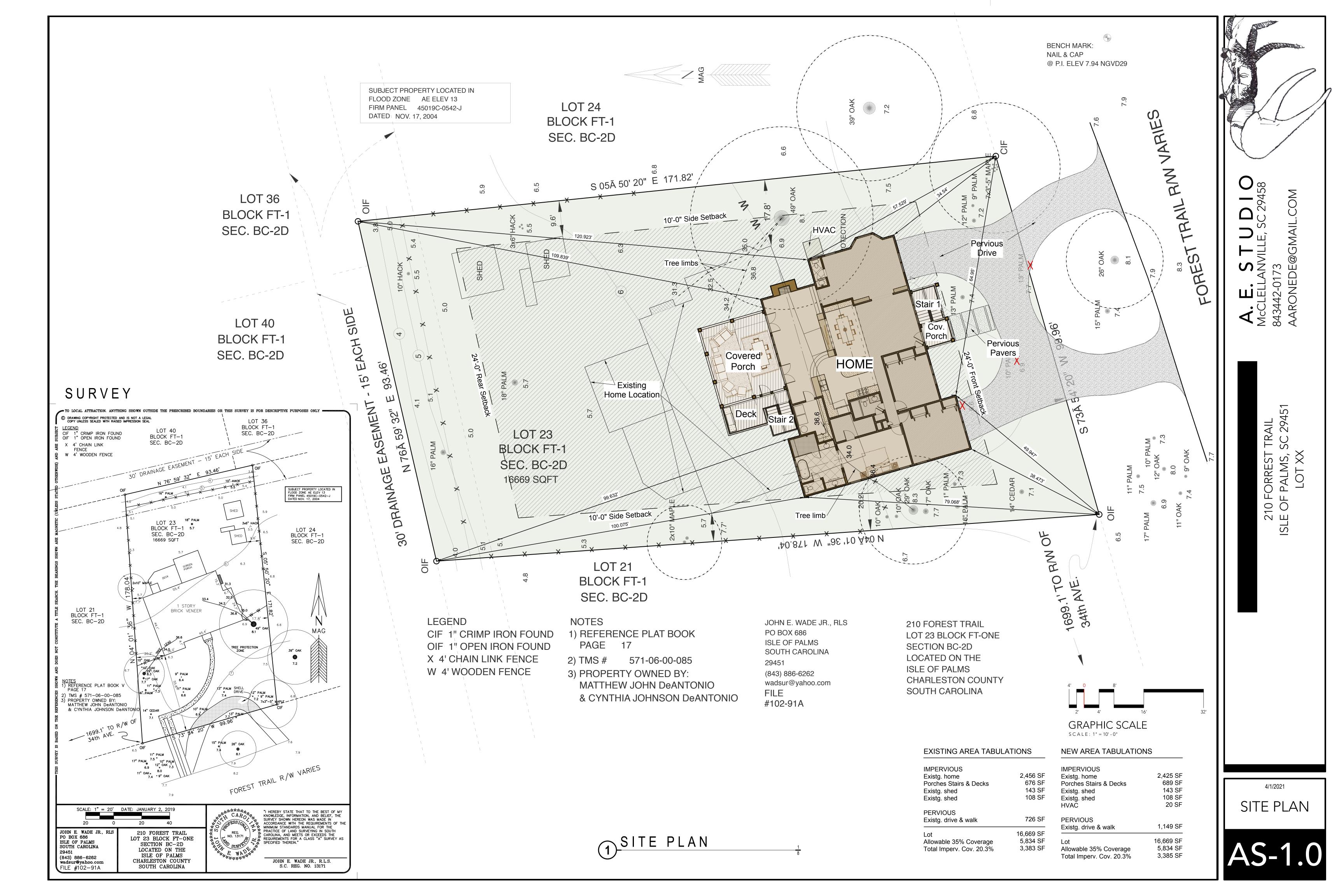
TMS # 571-06-00-085 FEMA MAP 45019C0542J Flood Zone AE 13 Construction& Permit Set 04/01/2023



COVER

4/05/2023





Division 00 00 00. Procurement and Contracting Requirements

00 00 00 - Procurement and Contracting Requirements

These specifications are designed to define specific materials and installation processes used in residential construction The Specifications work as a companion to the construction documents and materials lists to fully describe in detail the construction project.

00 10 00 - Instructions

Classification codes correspond, with the section headings and numbering system of the Construction Specifications Institute's MASTERFORMAT to provide uniformity in the organization of these specifications.

00 26 00 - Procurement Substitution Procedures

Contractor to investigate proposed products and determine that they are equal or superior in all respects to products specified. Coordinate installation of accepted substitutions into the Work, making such changes as may be required for the Work to be complete in all respects. Meet with clients and get change order request signed.

Division 01 00 00. General Requirements

01 50 00 - Temporary Facilities and Controls

This work shall consist of the application of temporary measures throughout the life of the project.

01 51 00 - Temporary Utilities

All connections and extensions required to provide temporary utilities shall be made by the Contractor at the Contractor's expense.

01 52 19 - Sanitary Facilities

Existing facilities shall not be used. Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as will comply with laws and regulations. Temporary toilet facilities may consist of portable toilets. The number shall be based on number of workers, 1 toilet per 15 workers. Toilet facilities shall be kept supplied and clean and in sanitary condition until the completion of the work and then shall be removed from the site. Upon removal the site shall be properly cleaned and graded.

01 53 00 - Temporary Construction

The contractor shall provide and maintain for duration of work all required temporary stairs, ladders, ramps, runways and hoists for use of all trades.

01 60 00 - Product Requirements (Scope of Work)

All materials shall be installed in strict accordance with the manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All Items not specifically mentioned that are required to make the work complete and operational shall be included.

Installation and Storage - All materials, supplies and equipment shall be installed per manufacturer's recommendations and per applicable codes and requirements. Material stored on site shall be protected from damage by moisture, wind, sun, abuse or any other harmful effects.

01 64 00 - Owner-Furnished Products

Contractor is not responsible for products furnished by the owner that are damaged prior to opening or receiving. Additional work required to install owner furnished products will be charged to the owner and due upon installation.

01 70 00 - Execution and Closeout Requirements

The execution of all work shall be in strict accordance with these specifications and manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All work not specifically mentioned that is required to make the work complete and operational shall be included.

Structural Engineering requirements supercede all specificatiuons and drawings herein.

Codes - Construction shall comply with all applicable national, state and local building codes including IBC 2018, IRC 2018 and IECC 2009. It is the responsibility of the Contractor to insure compliance with said codes and modify the specifications as needed to comply with such codes.

Contractor shall pay all taxes associated with contruction of the project. The owner shall be responsible for all taxes assciated with property ownership.

All permit fees shall be the responsibility of the contractor.

Review fees required by associated municipalities shall be the responsibility of the owner.

Measurements - The Contractor shall check and verify all dimensions and conditions before proceeding with construction. Do not scale drawings. Noted dimensions take precedence.

Insurance - Builders Risk Insurance shall be maintained by the contractor during the course of construction until final acceptance by the owner. All bonding and insurance requirements shall be coordinated with the Owner prior to beginning construction. All contractors shall provide and be solely responsible for necessary barricades and safety precautions, and strictly adhere to all governing codes on safety, including the OSHA Act.

Workmanship - Workmanship shall conform to the best and highest standards of quality in each trade and shall include all items of fabrication, construction and installation. All work shall be completed by skilled tradesmen and mechanics. Installation of all equipment and materials shall be in strict accordance with manufacturers recommendations.

Square Footage - Interior finished square footage figures represent heated and cooled floor area only and do not include additional area for two-story or vaulted spaces, garages, decks, porches or any other unfinished areas. These dimensions are generally measured from the outside face of the stud.

01 71 00 - Local Conditions

Construction shall comply with all applicable national, state and local building codes including IBC 2018, IRC 2018 and IECC 2009. It is the responsibility of the Contractor to insure compliance with said codes and modify the specifications as needed to comply with such codes.

01 74 00 - Cleaning and Waste Management

Construction site to be in a clean and orderly condition throughout the construction process. Clean interior spaces prior to the start of finish painting and the application of other finishes. At the conclusion of construction, the project shall be properly cleaned. This should include but not be limited to; cleaning the interior and exterior glass, surfaces exposed to view, remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surface areas, sweep and mop all tiled surfaces, etc. Replace filters of operating equipment. Clean equipment and

fixtures to a sanitary condition. Clean exterior such as debris from roof, gutters, landscape areas, driveways and walks, etc. Remove all waste and surplus materials.

01 76 00 - Protecting Installed Construction

Contractor to protect all installed construction. If products or materials come with a protective coating, contractor shall maintain protective coating until construction is complete. Contractor shall replace any items that become defective or damaged.

Division 02 00 00. Existing Conditions

02 00 00 - Existing Conditions

Contractor shall review construction documents and provide necessary site work, excavation and grading as required to construct said project.

02 41 00 - Demolition

Provide all labor, materials and equipment to perform the required demolition of existing pavement no longer needed for access or parking, abandoned utilities and structures which interfere with the proposed construction. When required install chain link fencing around the area of demolition work. Protect all adjacent areas not to be demolished. Remove all debris from job site before construction begins.

02 80 00 - Facility Remediation

Contractor to abate any hazardous material or substance before beginning construction. Contactor shall contract with a properly licensed and qualified hazardous material contractor.

02 81 00 - Transportation and Disposal of Hazardous Materials Remove and dispose of any hazardous material before beginning construction. Contactor shall contract with a properly licensed and qualified hazardous material contractor.

Division 03 00 00. Concrete

03 00 00 - Concrete

Contractor shall review construction documents and provide labor and materials pertaining to concrete and foundations as required in said documents and as specified herein, while complying with all applicable building codes.

03 05 00 - Common Work Results for Concrete See Structural Engineering.

Provide all labor, materials and equipment necessary for the completion of the plain and reinforced concrete called for on the plans. Concrete when deposited shall have a temperature ranging between a minimum of 50 degrees Fahrenheit and a maximum of 90 degrees Fahrenheit.

Construction of Forms - Construct wood forms of sound material, and of the correct shape and dimensions, constructed tightly and of sufficient strength. Brace and tie the forms together. Make joints and seams mortar tight. Install leakage control materials in accordance with manufacturer's installation instructions.

Chamfered Corners - Unless otherwise noted, provide chamfered corners on all exposed corners. Provide 1/2 inch moldings in forms for all chamfering required.

Embedded Items - make provisions for sleeves, anchors, inserts, water-stops and other features.

03 15 13 - Concrete Accessories

Provide 1/2" thick by 4" wide bituminous expansion joint material at all surfaces where slabs adjoin raised slab, crawlspace or basement stem-wall CMU or poured foundations.

03 21 00 - Reinforcing Steel

See Structural Engineering

03 22 00 - Welded Wire Fabric Reinforcing See Structural Engineering

03 30 00 - Footings

All footings shall rest on undisturbed virgin soil with minimum soil bearing allowable of 2500 psf, tested for 95 percent compaction. Footers shall bear on undisturbed soil and kept free from ground water.

A soils report shall be provided as required by the owner for the use of the Structrual Engineer.

See Structural Engineering

03 30 01 - Slab Foundations See Structural Engineering

Construction or control joints shall be provided in slabs on grade so that the maximum area between joints shall be 400 sq. ft. and the length of that area is not more than twice the width or every 10'. Provide smooth steel trowel finish for all interior slab areas and garage surfaces. Provide smooth finish texture for all exterior slabs unless otherwise noted on plans. See AS-1.0 and A-1.0. Slope exterior patio or porch slabs away from building at 1/4" of drop in elevation for every 1'-0" in distance. At garage slabs, provide positive drainage and taper lip at garage/overhead door.

03 35 00 - Concrete Finishing 05 10 10 - Structural Metal Framing Repair of surface defects shall begin immediately after removal of form or All structural metal for beams and plates shall be in accordance with ASTM A-36. pouring of slab foundation. Provide smooth steel trowel finish for all interior All structural steel for steel columns shall comply with ASTM specification A-53 slab areas and garage surfaces. Provide broom finish texture for all exterior Grade B or A-501. All steel details and connections shall be in accordance with slabs. Slope exterior patio or porch slabs away from building at 1/4" of drop in the requirements of the latest AISC specifications and latest revisions. Provide elevation for every 1'-0" in distance. At garage slab, provide positive drainage all required anchor bolts, bearing plates and metal ties required by standard and taper lip at garage/overhead door. Patch all voids and depressions practice and as noted below. exceeding 3/8 inch in any direction. See structual Engineering. Structural Engineering requirements supercede all Division 04 00 00. Masonry specificatiuons and drawings herein. 05 50 00 - Metal Fabrications 04 00 00 - Masonry Install metal detailing as specified on construction documents. Install metal Contractor shall review construction documents and provide labor and materials gates, grilles, iron work, etc. to meet all applicable building codes, with pertaining to masonry work as required in said documents and as specified appropriate detailing and patterns as shown in construction documents. Metal herein, while complying with all applicable building codes. shall be shop built, welded together, cleaned thoroughly and painted with two coats of an anti-rust primer. After installation, apply an additional coat and 04 05 19 - Masonry Anchorage and Reinforcing anti-rust primer in preparation for finish coats. See Structural Engineering 05 52 00 - Metal Railings Tie Fasteners - Wood Frame - Install corrosion resistant nails to attach the Not used. corrugated metal ties to wood frame construction. The nails should penetrate at least 1 1/4" into the wood studs. 05 52 13 - Pipe and Tube Railings Not used. Concrete or Masonry - Install ties with lag bolts and expansion shield or masonry nails. The fasteners and anchors should be corrosion resistant. When installing Division 06 00 00. Wood, Plastics, and Composites a continuous steel angle it should conform to ASTM A36 and be treated to resist corrosion. Steel angles - see structural. 06 00 00 - Wood, Plastics, and Composites 04 05 23 - Masonry Accessories Contractor shall review construction documents and provide labor and materials Flashing - Flashing materials may be bituminous membranes, plastics, sheet pertaining to carpentry work as required in said documents and as specified herein, while complying with all applicable building codes. metals or a combination of these. Continuous flashing shall be installed at the bottom of the air space. Flashing must be at or above grade. Flashing should be installed at the heads and sills of all openings and wherever the air space is 06 10 00 - Rough Carpentry interrupted. Flashing should extend through the face of the brick veneer to Lumber shall be of live, sound stock and properly dried. Pressure treated lumber shall be used where any lumber shall come into contract with concrete, form a drip edge. Where the flashing is not continuous, such as at heads and sills, the ends should be turned up approximately 1 inch. masonry block or soil and when using as support members for decks, porches or balconies. Lumber for use at exterior shall have a maximum 12 percent moisture Weepholes - Masonry weepholes, each having an area of at least 70 mm (0.1 content, for dry climates 9 percent is recommended. Provide adequate bracing sq.in.), are required above flashing in masonry cavity wall construction. and shoring during the construction process. Studs and joists cut to install Weepholes should be located in the head joints immediately above the flashing, plumbing and/or wiring shall be reinforced by adding metal or wood structural and spaced at 16" on center. If open head joints are used, a 24" on center reinforcing to strengthen member back to original capacity and maintain spacing is permitted; however, open joints are not recommended because the structural integrity. Holes bored shall not be larger than 1/3 the depth and not small openings are easily obstructed by mortar droppings. Open joints also closer than 2" to the top or bottom of the joist. permit insects to enter the building envelope. Wood Species: #2 Southern Yellow Pine. 04 20 00 - Crawlspace/Basement Foundations See Structural Engineering Mold treatment shall be provided with "Forti-cell" prior to installation. Termite treatment shall be provided with "Bora-Care" prior to installation. 04 21 13 - Brick Masonry All framing below BFE shall be of a treated or type III construction as required by Not used. FEMA. Brick Veneer: Not used 06 11 00 - Wood Framing Floor Framing - Information below pertains to conventional stick framing, if 04 21 13.13 - Brick Veneer Masonry Not used. pre-engineered trusses are used follow manufactures guidelines for installation. Pressure treated lumber shall be used where any lumber shall come into 04 22 00 - Concrete Unit Masonry contract with concrete, masonry block, roof curbing or roof blocking. See Structural Engineering. Girders: Install girders in pockets formed in the foundation or on top of the sill 04 40 00 - Stone Assemblies plate. The pocket should allow a minimum of 1/2" on both sides for circulation. Not used Girders: solid wood, two or more 2" planks, laminated veneer lumber, glue-lam 04 43 00 - Stone Masonry beams, steel beams Install exterior stone veneer per manufacturer's recommendations. See Sills: Install single 2"x 6", 4"x 6" or double 2"x 6" solid pressure treated lumber construction documents for location and detailing of stone veneer. Stone budget shall be determined by an allowance as stated in the Contract horizontally on foundation. Bore holes in sills for anchor bolts. Documents. Floor Joists: Space floor joists 16" on center (OC) depending on type of Stone veneer: Not used construction, load bearing and spanning capabilities of wood species. Joists shall rest on a minimum 1 1/2" of bearing wood or 3" of masonry. Cut joists 04 57 00 - Masonry Fireplaces flush with the outside edge of sill. If joists are lapped over girder, the minimum Install masonry fireplace on poured slab or reinforced concrete block base. At amount of lap is 4" and maximum overhang is 12". Do not lap at wood I-beams. firebox area install fire brick on all sides, and imbed with mortar. Allow for water Joists shall be installed so that the end of the sub-floor sheets fall directly on the trap in flue and cast iron damper. Install ash dump if fireplace is on outside wall center of the floor joists. Nail joists at each bearing point using one 8d or 10d or as otherwise specified. Brick shall be placed in a running bond with tooled nail on each side. Nails shall be at least 1 1/2" from ends. Wood cross bridging joints per the construction documents. Detailing, such as soldier courses, shall be at least nominal 1" x 3" lumber with two 6d nails at each end. Install rowlocks, quoins etc. shall be shown in the construction documents. See one row of bridging for 12'-0" spans and less, over 12'-0" spans install two rows construction documents for complete fireplace details. of bridging. Floor Joists: 2"x 10"s, 2"x 12"s, wood I-beams, wood or steel trusses, at 16" on Division 05 00 00. Metals 05 00 00 - Metals center (OC). Contractor shall review construction documents and provide labor and materials Exterior Walls - All exterior walls shall be constructed with 2"x 6" wood studs at pertaining to metal work as required in said documents and as specified herein, 16" on center (OC), with single bottom plates and double top plates throughout. while complying with all applicable building codes. Provide solid blocking at mid-height of all walls. For exterior corner joints, install (3) $2'' \times 6''$ nailed together as shown in Details on drawings. Where interior 05 05 23 - Metal Fastenings partitions meet exterior walls, install 2 studs fastened together with 2"x 4", 2"x See structural Engineering 6" blocks approximately one foot long as shown in details on drawings. One block is placed at the bottom, one at the top and one about center of the studs.

2"x 6" studs placed 16" on center (OC) - for higher ceilings and higher insulation values

Where exterior openings occur on 2"x 4" exterior walls, provide structural headers designed with (2) 2" x 10"'s with a 1/2" continuous plywood flitch plate glued and nailed between the $2^{"}x10^{"}s$. (For $2^{"}x6^{"}$ exterior walls provide (3) pieces of 2"x 10" lumber fastened securely together.) At window sills, provide a single piece of 2"x 4", 2"x 6" lumber. Provide double jacks or liners for openings 6'-0" wide or greater, unless otherwise noted. Provide plywood sheathing at exterior wall corners for shear wall strength and stiffness as per Structural Engineering.

All subfloors shall be 3/4" "Advantech."

Fascia and Soffit - Provide and install wood fascia and soffit. See construction documents for complete architectural details. Wood fascia board as noted in the drawings. Provide soffit vents as required by applicable building codes and roofing manufactures guidelines for ventilation.

Interior Walls

All interior walls shall be wood studs, with single bottom plates and double top plates throughout. Provide solid blocking at mid-height of all walls which exceed 9'-0" in height.

2"x 6" studs placed 16" on center (OC) - unless otherwise shown

Ceiling Joists: The size of ceiling joists are determined by span, load and the kind and grade of lumber. Check appropriate spanning charts with local building officials. At openings in ceilings, double joists for structural rigidity. See Structural Engineering.

Roof Framing: The size of joists are determined by span, load and the kind and grade of lumber. See Structural Engineering. Provide Simpson H2.5 anchors at all rafters or trusses to plates and at alternate studs.

Roof Decking - Provide and install exterior sheathing 5/8" Advantech panels. Sheathing shall be installed with the face grain running across the rafters, vertical joints staggered. Nailing requirements per Structural Engineering.

Decks, Porches, Balconies - Exterior grade lumber shall be used for exterior decks, porches or balconies. Provide and install galvanized joist hangers as per structural Engineering.

06 16 00 - Sheathing

Provide and install exterior sheathing wall sheathing of 1/2" CDX or equal. Provide treated CDX or equal to a height of minimum of 48" from bottom of wall. For plywood panels, use 6d nails spaced 6" apart on the edges and 12" apart on the studs. For Gypsum sheathing use roofing nails or button caps, spaced 4" apart around the edges and 8" apart on the studs. inside. For rigid foam board consult EIFS system for specific manufacturers recommendations.

06 16 23 - Subflooring

3/4" "Advantech" plywood sub-floor shall be installed with both nails and approved sub-floor adhesive. Stagger joints a minimum 2 stud spaces. Provide 3/4" "Advantech" throughout Attic, complete.

06 18 13 - Glued-Laminated Beams

For large spans, structural laminated beams will be required as set forth in the construction documents or by applicable building codes. Laminated timber is hereby defined to include engineered stress-rated products of wood members

fabricated from 1" to 2" nominal thickness lumber glued face to face to a depth of four laminations or more.

Glue-lam Beams shall have a minimum bending design values (Fb) of 2400 psi and a modulus of elasticity of 1,800,000. Install with crown up.

Micro-Lam Lumber shall have a minimum bending design values (Fb) of 2,800 psi and a modulus of elasticity of 2,000,000 psi.

Parallam Beams shall have a minimum bending design values (Fb) 2900 psi and a modulus of elasticity of 2,000,000 psi

06 20 00 - Finish Carpentry

All architectural trim and woodwork shall be No. 1 grade material suitable for appropriate finishes. Wood that will be stained shall be clear of knots with concealed joints.

06 22 00 - Millwork

Moisture content for interior woodwork shall be 8-10 percent to reduce excess shrinking. Provide and install interior wood trim as shown in construction documents.

06 40 00 - Architectural Woodwork

Provide and install custom woodwork as described on construction documents.

06 43 00 - Wood Stairs and Railings

Heights of treads, lengths of risers and overall width of stairs shall comply with applicable building codes.

06 60 00 - Plastic Fabrications

Provide and install plastic fabrications as specified on construction documents. Install to meet all applicable building codes, with appropriate detailing and patterns as shown in construction documents. Plastic fabrications shall be shop built, attached together, cleaned thoroughly and painted with two coats of a primer. After installation, apply an additional coat and primer in preparation for finish coats.

A. E. STUDIO McClellanville, SC 29458 843-442-0173 AARONEDE@GMAIL.COM
210 FORREST TRAIL ISLE OF PALMS, SC 29451 LOT XX
4/01/2023 GENERAL

SPECIFICATIONS

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Division 07 00 00. Thermal and Moisture Protection

07 00 00 - Thermal and Moisture Protection

Contractor shall review construction documents and provide labor and materials pertaining to thermal and moisture protection work as required in said documents and as specified herein, while complying with all applicable building codes.

07 10 00 - Dampproofing and Waterproofing

All joints and penetrations in walls, floors, and roofs shall be made watertight using approved methods and materials. Waterproofing and dampproofing recommendations contained herein are minimum, check with local code officials for additional requirements.

Slab Foundations - Install a minimum (6 mil) polyethylene vapor barrier in all slabs, directly underneath concrete. Lap joints not less than 12 inches and tape and seal in accordance with manufacturers guidelines.

Crawlspace Foundations - Install a minimum (4 mil) polyethylene vapor barrier in all crawlspace areas. Lap joints not less than 12 inches and seal in accordance with manufacturers guidelines.

Foundation Walls - Below grade dampproofing shall be provided at all walls below grade. Provide Hydrostop Barrier Gaurd" within 2" below finished grade.

Ice & Watershield shall be provided at all wall corners, roof surfaces , as well as door and window openings. Roof waterproffing shall meet all NRCA guidelines.

07 13 13 - Felt

On all roof surfaces install Ice & Watershield underlayment.

07 20 00 - Thermal Protection

Effective R values shall be in accordance with local and state energy codes. Floor, walls and ceilings insulation shall be constructed with: batt insulation. Roof systems shall be sprayfoam isulation. Nooks, crannies, penetrations and crevices shall be filled to fully insulate the home.

Sound attenuation R15 blankets shall be provided at all plumbing chases, bedrooms, bathrooms, laundry rooms as well as walls and ceilings housing TV's, speakers and otehr sound making devices.

Exterior Walls -	Provide R21 at 2X6 walls and R15 at 2X4 walls.
Floors -	Provide R19 Fiberglass batt inulation.
Ceilings -	Provide R30 at flat ceilings and R38 at vaulted ceilings.
Elevator Shaft -	Provide R21 Fiberglass batt inulation.
Roofs -	Provide foam insulation at all roof systems with a minumum R
	rating of 7 per inch of thickness.

07 31 13 - Asphalt Shingles 150mph Asphalt Shingles. Match existing color and texture.

07 31 26 - Slate Shingles Not Used

7 31 29.13 - Wood Shingles Not Used

07 32 00 - Tile Roofing Not Used

07 32 13 - Clay Roof Tiles Not used

07 40 00 - Metal Roof Panels

As selected. Install per mfr. recomendations and in accordance with 2018 IRC.

07 46 00 - Siding

Provide and install James Hardi siding exterior in accordance with applicable building codes and manufacturers guidelines. Install over "homeslicker" on #30 felt as specified. Match existg.

07 71 23 - Manufactured Gutters and Downspouts

Install 6" wide round metal gutters and 5" round downspouts. Attach every 2'-6" on center (OC) with straps and/or fasteners. Metal should be 24 gauge galvalum.

07 72 00 - Roof Accessories

Vents - Proper roof ventilation requires a minimum 1 sq inch of vent area for every 2.08 square feet of attic floor area. Provide a minimum of 144 square inches of free air ventilation for every 300 square feet of attic floor area. 50% of the roof ventilation should be located adjacent the roof peak with the other 50% located in the soffit area under the eaves to provide natural convection throughout the attic area. Check ventilation requirements with roof system manufacturer.

Soffit Vents - Install corrugated continuous soffit vents as show in wall sections.

Ridge Vents - Install ridge vents at top of ridge for the removal of heated attic air

07 92 00 - Joint Sealants

Use a 50 year warranty silicon based caulk at high expansion/compression areas, such as around chimneys, tile, ceramic, and around enamel and pre-fabricated tubs and showers. For exterior windows, door frames, interior trim, woodwork and other paintable surfaces use a clear, colored Latex based caulk. Color shall match wood stain or paint.

Division 08 00 00. Openings

08 00 00 - Openings

Contractor shall review construction documents and provide labor and materials See Interior Design and finish scedules. pertaining to the doors and windows as required while complying with all applicable building codes. In all sleeping areas provide an operable egress 09 64 00 - Wood Flooring standard window or door directly to exterior.

08 11 01 - Exterior Doors

Install per manufacturer requirements. See Schedules on drawings for make, model and size. Provide copper head and pan flashing with watertight end dams at all door openings.

08 14 00 - Interior Doors

Interior doors shall be 1 1/34 "masonite as scheduled. Provide weatherstripping at unconditioned space such as elevator shafts and dumbwaiters. Fire rated doors shall be "C" labeled 20 minute rated - at elevator and garage access.

08 50 00 - Windows

Confirm that openings are compliant with all applicable building codes concerning egress, lighting and ventilation requirements. Temper all glass located within 2'-0" from exterior doors, all glass in doors and above tub enclosures. Provide and install necessary windows and appropriate hardware to operate and lock windows. Bedroom windows shall comply with Code requirements for emergency escape with appropriate egress hardware. Minimum net clear opening shall be 5.7 sq.ft., minimum net clear width shall be 20", minimum net clear height shall be 24" and sill height shall not exceed 24" above floor. Hardware Finish shall be: white, bronze. Consult window and glazing schedule below.

Install per manufacturer requirements. See Schedules on drawings for make, model and size. Provide copper head at all window openings.

08 71 00 - Door Hardware

Finish hardware shall include keyed deadbolt locksets at all exterior doors. Interior doors shall be a combination of privacy and passage locks. Hardware shall be as per allowance. See Interior Design for hardware

08 75 00 - Window Hardware

Finish hardware shall include locksets at all exterior windows. Install as specified by manufacturer.

08 83 00 - Mirrors

Install sheet mirrors as noted in construction documents. Install with silicon sealant and spacer strips per manufacturers recommendations. See Interior Design.

Division 09 00 00. Finishes

09 00 00 - Finishes

Contractor shall review construction documents and provide labor and materials pertaining to the finishes as required in said documents and as specified herein, while complying with all applicable building codes.

09 29 00 - Gypsum Board

Gypsum board must be held firmly against the framing while fastening to avoid later movement of gypsum board on the shank of the nails or screws.

Nails or Screws: Nails and screws shall be a minimum 3/8" and a maximum of 1/2" from edges and ends of wallboard and the heads shall be seated slightly below the surface without breaking the paper. Nails shall be spaced not to exceed 7" on ceilings or 8" on sidewalls. Head diameter shall be a nominal 1/4" with the length 1 1/2" to penetrate a minimum of 7/8" into nailing member. Nails shall meet the minimum requirements of ASTM C514 and may include coated, etched treated or annular ring shanks to improve withdrawal resistance. Drywall screws shall meet the minimum requirements of ASTM C1002. Bugle-shaped heads shall be 0.315" in nominal diameter and contain a No. 2 Phillips driving recess. Type "W" screws are designed for easier fastening in wood.

Joints: At gypsum wallboard joints install a 2" strong, cross threaded tape with a cross tensile strength of 45 lbs per lineal inch. Press a strong, good quality tape firmly onto sheathing joints and around openings, imbedded in joint cement. At corners and angles, install metal corner beads as specified by manufacturer. If corners are rounded, install corner reinforcement as required. Spread gypsum wallboard mud at all tape joints, corner beads, nails and screw penetrations and where a smooth surface is needed. Apply second coat of wallboard mud after a minimum 24 hours. After drying (minimum 48 hours), sand all joints and other areas to a smooth consistent surface.

Interior Walls: Sheath walls with with 1/2" gypsum wallboard and ceilings with 5/8" gypsum wallboard, horizontally with long edges at right angles to framing members. Apply one layer of $1/2'' \times 4' \times 8'$, 9', 10' or 12' foot lengths to all wall surfaces. Offset joints between layers at least 10". Walls shall be a tru and smooth level 5 finish.

Ceilings: Apply a single layer of 1/2" gypsum wallboard across the supports and fasten with nails or screws. Offset joints between layers at least 10". Nails are spaced 6" on center (OC) with 1 1/4" heads. Screws are spaced 12" on center (OC). Ceiling finish shall be true and smooth level 5 finish.

Garage Ceiling: Provide 5/8" Fire-Rated type "X" gypsum wallboard with a smooth level 4 finish.

Nails shall be 1 3/4" long, spaced a maximum of 4" on center (OC) around perimeter and 8" on center (OC) in the field of the board.

Water Resistant Gypsum Wallboard: Around showers, tubs, whirlpools, or as required by applicable building codes, install 1/2" water resistant drywall.

09 30 00 - Tiling

Tile, Marble, Slate shall be appropriate grade and finish in accordance with applicable building codes and owner requirements. Contractor shall properly clean all surfaces to be covered and install appropriate underlayment per manufacturers recommendations. Installation should be carried out with a slow setting cement adhesive, well mixed per manufacturer recommendations. Grouting of control joints can be executed either with cement based grout or with resin based organic materials.

Floors: Contractor shall properly clean all surfaces to be covered and install appropriate underlayment per manufacturers recommendations.

Install a single layer of #30 lb felt vapor barrier between sub-floor decking and hardwood floors. When installing hardwoods over a concrete slab install a layer of 3/4" plywood as underlayment over 6 mil polyethylene. Along walls and permanent objects, install a 1" quarter round molding to conceal expansion area.

Pre-finished : Wood flooring shall be tongue and groove construction and true square edged for a flat smooth surface. Wood flooring can be fastened with appropriate nails, staples or glue. Check specific manufacturer's recommendations.

Unfinished: Wood flooring shall be tongue and groove construction, 3/8" thick x 2 1/4" wide, random lengths with true square edge for a flat smooth surface. Adhesive shall be used for pre-finished 3/8" plank, strip and parquet (5/16" and 3/4"). Adhesive for end fastening 3/4" random planks shall be as recommend by manufacturer. Use 2" barbed fasteners of approved staples for installing plank or strip flooring. After a minimum of 48 hours, sand and finish, using a stain coat and a minimum three coats of polyurethane.

See Interior Design and finish schedules.

09 70 00 - Wall Finishes

Walls shall be clean and free of defects such as cracks or unfinished joints prior to installation of wall finishes. If mildew is evident, mildew must be removed and surface properly treated to inhibit further mildew growth.

09 74 00 - Interior Paneling

Install wood in areas as indicated on Finish Schedule. Butt-joint all seams without overlapping. Wood species and grain shall match and be free of defects. Apply paneling over gypsum wallboard.

09 90 00 - Painting and Coating

Prepare each surface to receive scheduled work as set forth below.

09 91 13 - Exterior Painting

All nail heads shall be set below the surface and finished smooth. If mildew is evident, the mildew must be removed and surface treated to inhibit further mildew growth. Exterior surfaces to be painted shall recieve o1 coat of primer and 3 coats of high-quality paint. Pre-prime the backside, edges and ends of lumber and siding prior to construction. When staining, pre-prime with the same product as specified for the final coat. Sand and putty wood surface smooth before finish is applied. Surfaces shall be sanded before each finish layer is applied.

09 91 23 - Interior Painting

All nail heads shall be set below the surface and finished smooth. Joints should be taped and covered with a suitable drywall joint compound. Sand the spackled nail heads and joint compound smooth and dust well before priming. Interior walls shall receive a sealer primer coat and two finish coats of

high-guality paint. Surfaces shall be sanded before each finish layer is applied.

09 93 00 - Interior Wood

Wood surfaces shall be sanded smooth before finish is applied. Putty areas with a wood based filler where nails or other defects appear in the surface. Paint/Stain - Prime wood surfaces including faces, edges and ends before installation. After installation, apply at least one coat of wood primer and two coats of finish paint. Surfaces shall be sanded before each finish layer is applied.

09 96 53 - Elastomeric Coatings

Contractor shall provide "Duradeck" or equal deck coating where indicated in the Costruction Documents using all necessary cant strips, flashing, drip and apurtenances per manufacturer requirements.

09 97 13 - Galvanized Metal

Before applying a finish, remove dirt, oil, grease and other loose particles. Wash with solvent. If rusted, wire brush or sand clean.

09 97 14 - Steel and Iron

Remove all weld splatter. Grind all edges, projection, sharp corners and welds to a smooth, round contour. Abrasive/sand blast steel and iron surfaces. In areas where blasting is not feasible use power cleaning tool. Remove dust and sand from the surfaces after sand blasting by brushing and vacuum cleaning. Apply the prime coat as soon as possible after the preparation is complete and before the dew point is reached. All surfaces blasted and power-tooled in one day shall be coated on the same day.

09 97 23 - Concrete and Masonry Coatings

Allow masonry, concrete and stucco to age at least one month before cleaning or applying a finish. Remove dirt, grease, loose particles, etc. Where efflorescence has occurred, wash with a 10% muriatic solution, rinse thoroughly with clean water and allow to thoroughly dry at least one week before painting or sealing.

Division 10 00 00. Specialities

10 00 00 - Specialties Contractor shall review construction documents and provide labor and materials pertaining to the specialties as required.

10 28 16 - Bath Accessories See Interior Design

10 28 19 - Tub and Shower Doors No Used

10 30 00 - Fireplaces and Stoves Not used

10 31 13 - Manufactured Fireplace Chimneys Not used

10 55 00 - Postal Specialties Not used

Division 11 00 00. Equipment

11 00 00 - Equipment

Contractor shall review construction documents and provide labor and materials pertaining to the equipment as required in said documents and as specified herein, while complying with all applicable building codes.

11 31 00 - Residential Appliances

Install electrical or gas appliances as shown on construction documents, including all venting and supply requirements per manufacturers recommendations. See electrical specifications for wiring information.

11 33 00 - Retractable Stairs Not used.

Division 12 00 00. Furnishings

12 00 00 - Furnishings See Interior Design.

12 20 00 - Window Treatments See Interior Design.

12 23 00 - Interior Shutters See Interior Design.

12 30 00 - Casework Custom. See Interior Design

12 36 00 - Countertops

Stone as selected. See Interior Design

Counter tops shall be provided and installed per construction documents and finish schedules. Counter surfaces shall be glued onto 3/4" plywood or appropriate substrate as recommended by manufacturer. See tile section for further specifications pertaining to ceramic or stone counter-tops.

12 93 00 - Site Furnishings Provide and install ornamental details as specified in construction documents.

Division 13 00 00. Special Construction

13 00 00 - Special Construction Contractor shall review construction documents and provide labor and materials pertaining to the specialty systems as required in said documents and as specified herein, while complying with all applicable building codes.

13 11 00 - Swimming Pools Not used

Division 14 20 00. Conveying

14 24 00 - Hydraulic Elevators Not used

Division 15 00 00. Mechanical

15 00 00 - Mechanical

Contractor shall review construction documents and provide labor and materials pertaining to the mechanical systems as required in said documents and as specified herein, while complying with all applicable building codes.

Division 22 00 00. Plumbing

22 00 00 - Plumbing Not used

22 40 00 - Plumbing Fixtures Not used

See Interior Design.

Division 23 00 00. Heating, Ventilating, and Air Conditioning (HVAC)

23 09 00 - Instrumentation and Control for HVAC Not used

23 31 00 - HVAC Ducts and Casings Not used

23 70 00 - Central HVAC Equipment Not used

Division 26 00 00. Electrical

26 00 00 - Electrical

Contractor shall review construction documents and provide labor and materials pertaining to the electrical system as required in construction documents and as specified herein, while complying with all applicable building codes, local utility requirements and building restrictions.

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26 05 00 - Common Work Results for Electrical

From electrical meter box, install above ground wiring to building. Raceways to be buried shall be PVC #2 Plastic Electrical conduit. Where permitted by code, non-metallic sheathed cable may be used. Type THW or THWN 600 volt insulation conductors shall be used, minimum wire size shall be #12. Aluminum wire shall not be permitted. Wiring shall connect into metal recessed electrical panel, as shown on construction documents. Electrical service shall be rated at 200 amps. Wiring from the outside meter box shall be SE cable.

26 05 19 - Conductors and Cables

Provide and install necessary circuits and breakers for appliances as stated in manufacturer's recommendations per applicable building code requirements.

Branch circuits shall be wired with No. 12 gauge wire. Install GFI circuits with No. 12 gauge wire in all wet areas, baths and exterior outlets.

26 05 33 - Raceway and Boxes for Electrical Systems

Flexible or rigid conduits, couplings, supports and nonmetallic ducts. Install conduit concealed in all areas, excluding mechanical and electrical rooms/areas, connections to motors and connections to surface cabinets. Coordinate installation of conduit in masonry work. Unless indicated otherwise, do not install conduit larger than 2 1/2 inches in concrete slabs. Provide a minimum concrete cover around conduits of 2 inches. Install conduit free from dents and bruises. Plug ends to prevent entry of dirt and moisture. Minimize crossovers. Provide flashing and pitchpockets, making watertight joints where conduits pass through roof or waterproofing membranes. Route all exposed conduits parallel or perpendicular to building lines. All fittings shall be UL approved.

Fasten raceways securely in place. Firmly fasten within 3 feet of each outlet, junction box, cabinet or fitting. Support every 10 feet.

26 24 00 - Switchboards and Panelboards

26 27 26 - Wiring Devices

Not used

Install receptacles, switches and cover plates as per construction documents and finish schedules. When two or more switches or receptacles are located together, gang with one common faceplate. If they cannot be ganged, install with a minimum distance between units. Install all receptacles at 18" on center (OC) above finished floor (AFF), unless otherwise noted. At counters, locate receptacles at 44" on center (OC), above finished floor (AFF). Install switches at 48" on center (OC) above finished floor (AFF). Locate light switch cover plates 6" from frame of door or corner of wall.

26 50 00 - Lighting

Provide necessary circuits and wiring for light fixtures per Electrical Plans. All lighting shall be switched as noted on construction documents. For exact locations of fixtures, see Electrical Drawings. See Interior Design for Special fixtures.

Division 28 00 00. Electronic Safety and Security 28 30 00 - Detection and Alarm

Not used.

28 31 46 - Smoke Detection Sensors

Install at least one smoke alarm on every floor of a structure (including the basement) and outside each sleeping area. Smoke alarms are required in all sleeping rooms, according to the NFPA 72, National Fire Alarm Code®. Mount the smoke alarms on ceilings or high on walls. Ceiling-mounted alarms should be installed at least four inches away from the nearest wall; wall-mounted alarms should be installed at least four inches, but not more than 12 inches away from the ceiling. On vaulted ceilings, be sure to mount the alarm at the highest point of the ceiling. Don't install smoke alarms near windows, outside doors, or ducts where drafts might interfere with their operation. Do not paint, apply finish or obstruct smoke alarms.

Division 31 00 00. Earthwork

31 10 00 - Site Clearing

The area of clearing shall be maintained within the limits shown on the appropriate site plans. Remove stumps and matted roots to a depth of 24 inches below existing ground surface. Dispose of trees and shrubs in accordance with applicable garbage, refuse or weeds ordinance. Do not burn materials on site.

Soil Bearing - Foundation designs are based on a soil bearing value of 2500 psf. Foundations and slabs are designed to uniformly bear on well-compacted, well-drained non-expansive soils. A certified soils engineer shall review foundation designs and building loads and compare with subsurface soil investigation. Should on-site observations show that foundation designs are not satisfactory, a structural engineer should be contacted immediately to redesign foundations to accommodate conditions.

31 11 00 - Clearing and Grubbing

Clear and grub the construction site. Grade building site with appropriate soils. Existing trees to remain shall be marked prior to clearing and protected to prevent damage. If any damage is done to walkways, driveways, etc, needed repairs shall be provided by the contractor. Repair or replace any damaged vegetation or terrain that is indicated to be protected or is more than eight feet from the edge of any construction.

31 20 00 - Earth Moving

Base of footings shall extend down to undisturbed virgin soil which has been compacted to 95 percent proctor density. All excavation shall be to a level below existing demolition debris. Board form all footing as required by soil conditions.

At slab foundations, compact sub-grade under slabs to a minimum 95% density. Compact backfill areas not under slabs or foundation to a minimum 90% ASTM D-689. Sub-base directly under concrete slabs on grade shall be a minimum of four inches of compacted granular fill.

31 22 00 - Grading

Carefully remove loam and topsoil to be incorporated in the finished work and store separate from the other excavated material. Failure to isolate loam and topsoil from the other excavations shall require that said soils not be used as topsoil.

31 22 13 - Rough Grading

Prior to commencement of earthwork, perform such soil and rock removal and filling as may be required to facilitate the progress of the work and bring all elevations to the rough grade lines indicated on the Contract Documents. Fill or backfill as required.

31 22 19 - Finish Grading

Provide swales with positive outfall and slope grade away from building to allow water to drain away from the building foundation. Do not backfill against foundation until project is completely framed and roof structure is in place.

31 23 00 - Excavation and Fill

Backfill material to be used from the excavations shall be of such nature that after it has been placed and properly compacted, it will make a dense, stable fill. It shall not contain vegetation, masses of roots, stones or porous matter and shall not be saturated. Organic matter shall not exceed minor quantities and shall be well distributed.

31 23 16 - Excavation

Carry out the excavation, dewatering, sheeting and bracing in such manner as to eliminate any possibility of undermining or disturbing the foundations or any existing structure or any work previously completed.

31 25 00 - Erosion and Sedimentation Controls

Clear the top layer of soil and place in a designated area for use at the end of the project. Provide swales with positive outfall, and slope grade away from building to allow water to drain away from the foundation. Do not backfill against foundation, until home is completely framed and roof structure is in place.

31 31 16 - Termite Control

Foundations shall be pre-treated under all slabs and crawlspace areas between vapor barrier and granular sub-base to conform with HUD minimum standards and applicable building codes. Treatments shall not be made when soil is excessively wet or after heavy rains. Contractor shall provide a one-year renewable warranty.

Division 32 00 00. Exterior Improvements

32 13 13 - Concrete Pads and Walks

Provide light duty paving at automobile parking areas consisting of a 4"thick slab on sub-grade compacted to 98 percent density with 3000 psi concrete and welded wirte mesh. Consult site plan for additional information. Expansion joints shall be installed as in standard concrete practices. Control joints shall be installed at pre-determined locations no later than 12 hours after installation.

32 14 00 - Unit Pavers See Landscape Architecture.

32 14 13.13 - Interlocking Precast Concrete Unit Paving See Landscape Architecture

32 14 16 - Brick Unit Paving See Landscape Architecture.

32 14 40 - Stone Paving See Landscape Architecture.

32 31 00 - Fences and Gates Not used.

32 31 19 - Decorative Metal Fences and Gates Not used.

32 31 29 - Wood Fences and Gates

Not used.

Division 33 00 00. Utilities

33 00 00 - Utilities Not used

Bid Alternates

Builder shall provide owner ugrade option bid alternates for the following items:

- 1.) Impact rated windows vs. impact panel system. See A-5.0
- 2.) New rear porch system with sun deck vs. base bid preserve the existing rear covered porch and provide flanking sun decks. See A-1.0 & A-1.1
- 3.) Owner upgrade option: Tumbled shell and salt rock conncrete finish vs. base bid: smooth finish. See A-1.0
- 4.) Stamped plank & acid stained concrete finish. See A-1.0
- 5.) Stucco finish at new cmu piers. See A-1.0
- 6.) Aluminum Gate. See A-1.0 & A-5.0
- 7.) New window @ Master Bedroom. See A-1.1
- 8.) New standing seam metal roof vs. base bid asphalt shingle. See A-1.3
- 9.) Bahama Shutters at New Front Porch. See A-1.1 & A-2.0

RESCHECK



210 Forrest Trail Project

Energy Code:	2009 II
Location:	Isle of
Construction Type:	Single-
Project Type:	Additio
Climate Zone:	3 (190
Permit Date:	-
Permit Number:	
Construction Site: 210 Forrest Trail	

Isle of Palms, South Carolina 29451

IECC Palms, South Carolina -family on 06 HDD)

> **Owner/Agent:** Matt & Cindy DeAntonio 210 Forrest Trail Isle of Palms, South Carolina 29451 (843) 532-6288 matt@charlestonresidential.net

Designer/Contractor:

Compliance: Passes using UA trade-off Compliance: 28.1% Better Than Code Maximum UA: 487 Your UA: 350 Maximum SHGC: 0.30 Your SHGC: 0.24

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

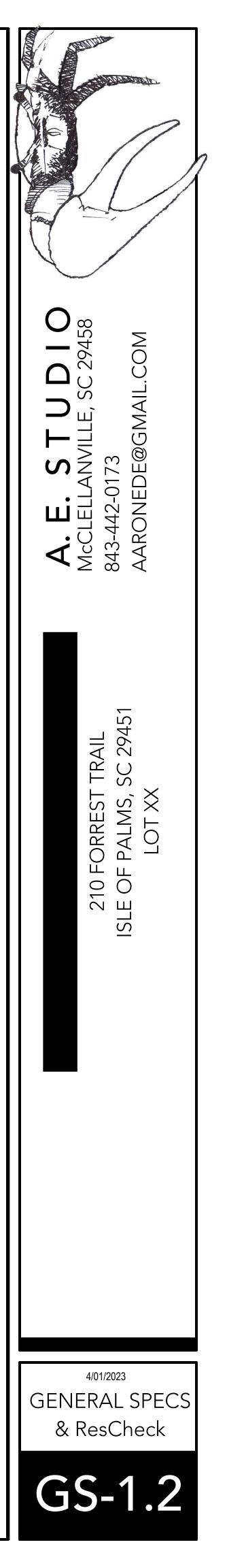
Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

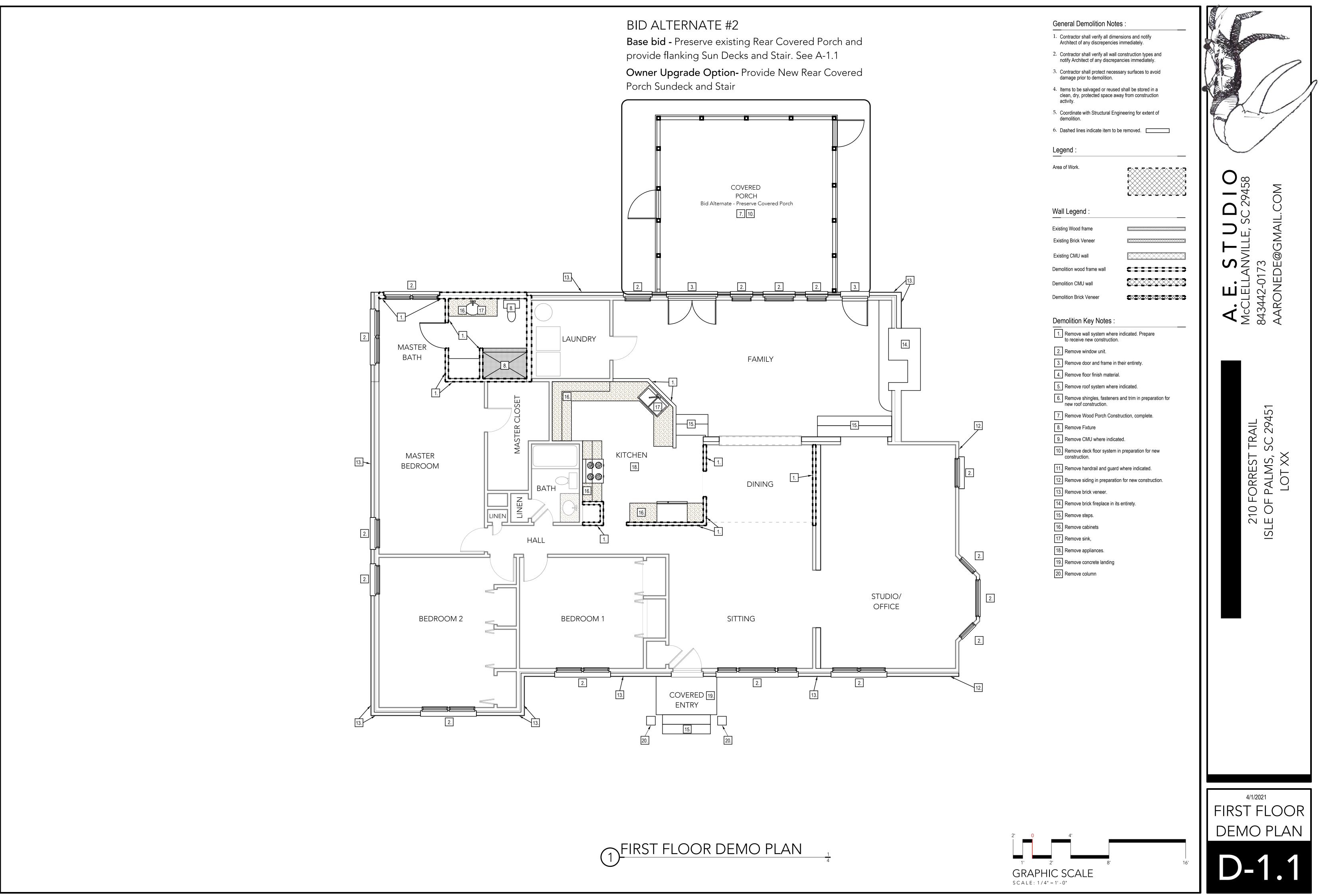
Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling: Flat Ceiling or Scissor Truss	2,405	0.0	30.0	0.031	0.035	75	84
Wall: Wood Frame, 16" o.c.	1,728	0.0	15.0	0.051	0.082	70	113
Door: Glass Door (over 50% glazing) SHGC: 0.24	107			0.310	0.500	33	53
Window: Wood Frame SHGC: 0.24	247			0.240	0.500	59	124
Floor: All-Wood Joist/Truss	2,405	19.0	0.0	0.047	0.047	113	113
<i>Compliance Statement:</i> The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2009 IECC requirements in REScheck Version : REScheck-Web and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.							
Aaron Ede - Project Designer	4	1.1.ED	E		1/2	2/23	
Name - Title	Signat	tu f e			Da	te	

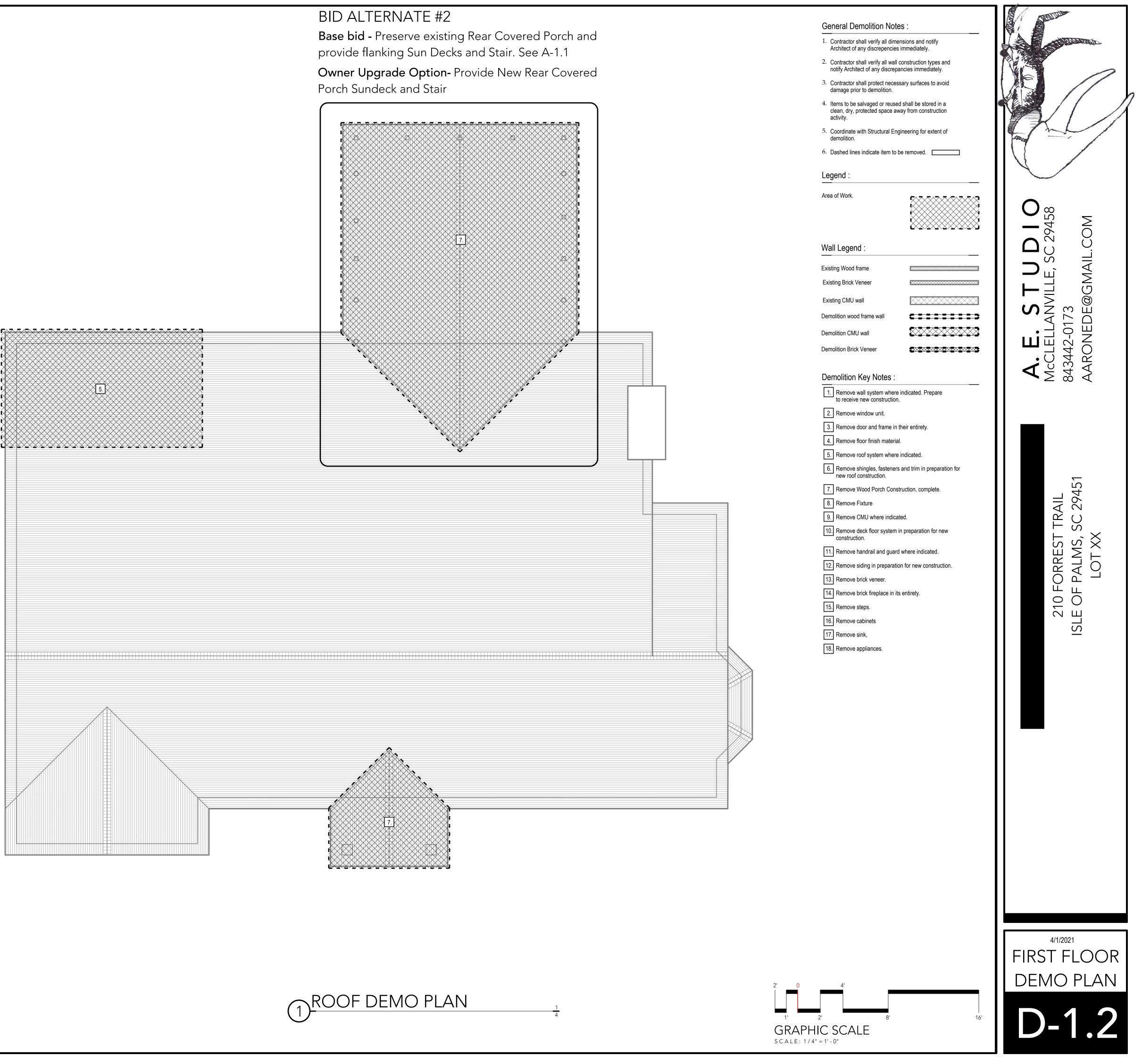


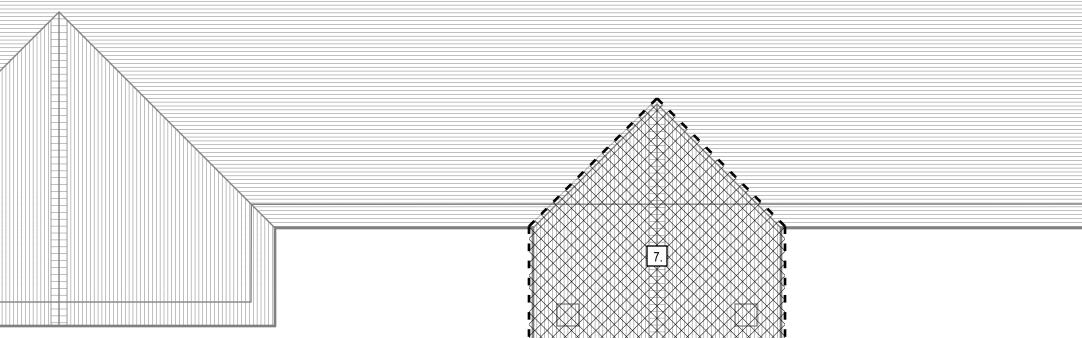
Insulation Rating	R-Value	
Above-Grade Wall	15.00	
Below-Grade Wall	0.00	
Floor	19.00	
Ceiling / Roof	30.00	
Ductwork (unconditioned spaces):		
Glass & Door Rating	U-Factor	SHGC
Window	0.24	0.24
Door	0.31	0.24
Heating & Cooling Equipment	Efficiency	
Heating System: HVAC heat pump	<u>15 & 15</u> .10	
Cooling System: HVAC heat pump	<u>15 & 15</u> .10	
Water Heater: Rinnai	Rinnai	
Name: Aaron Ede	Date: 1/2/23	
Comments		

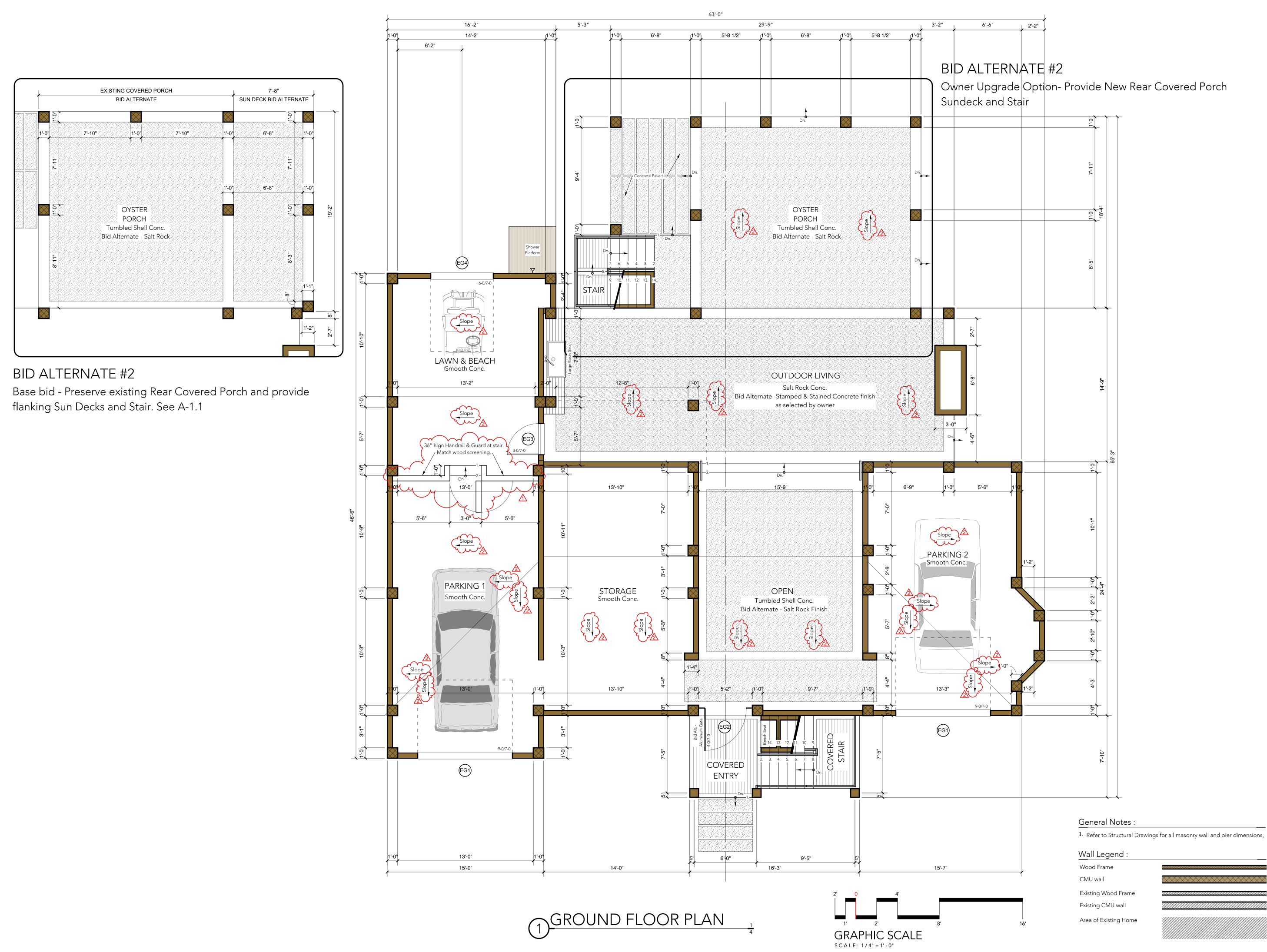


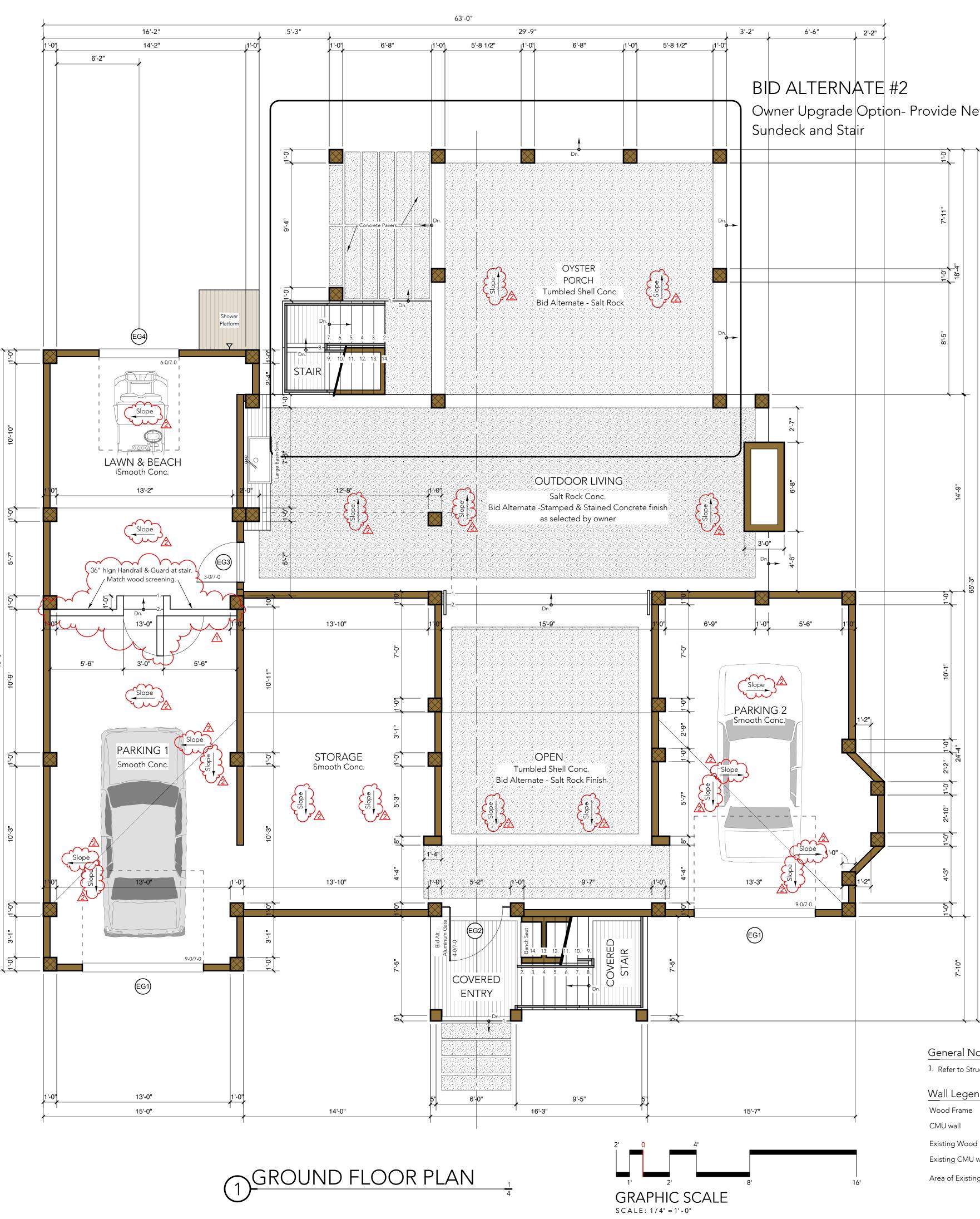




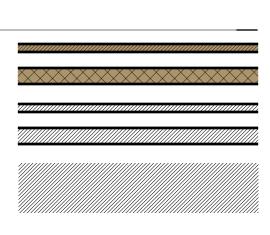


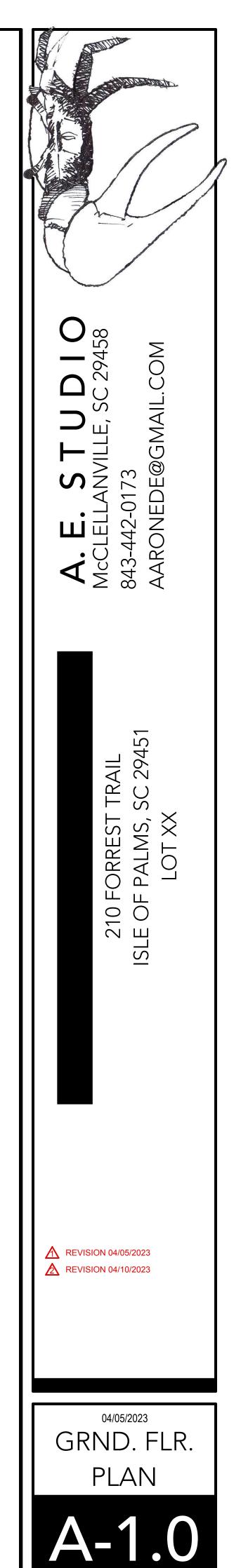


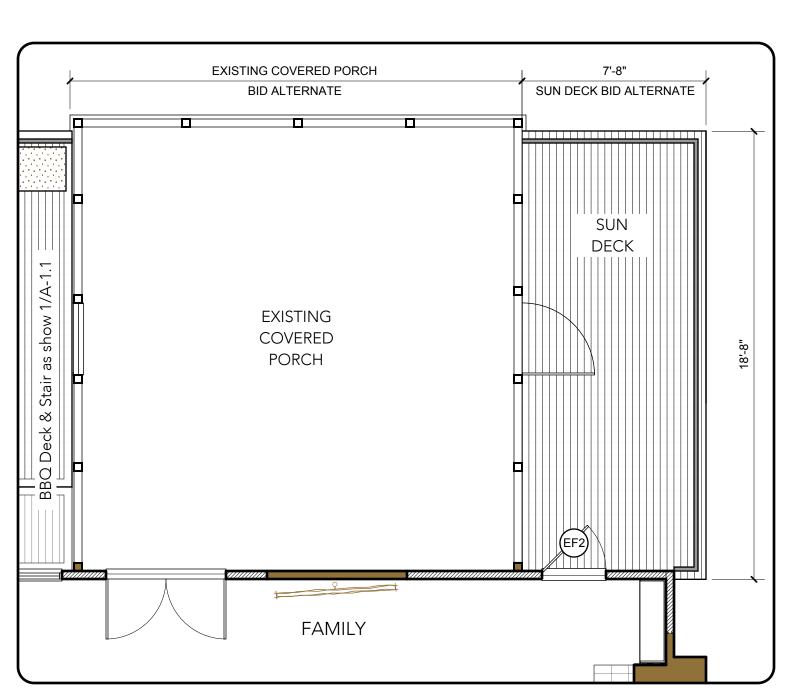




Owner Upgrade Option- Provide New Rear Covered Porch

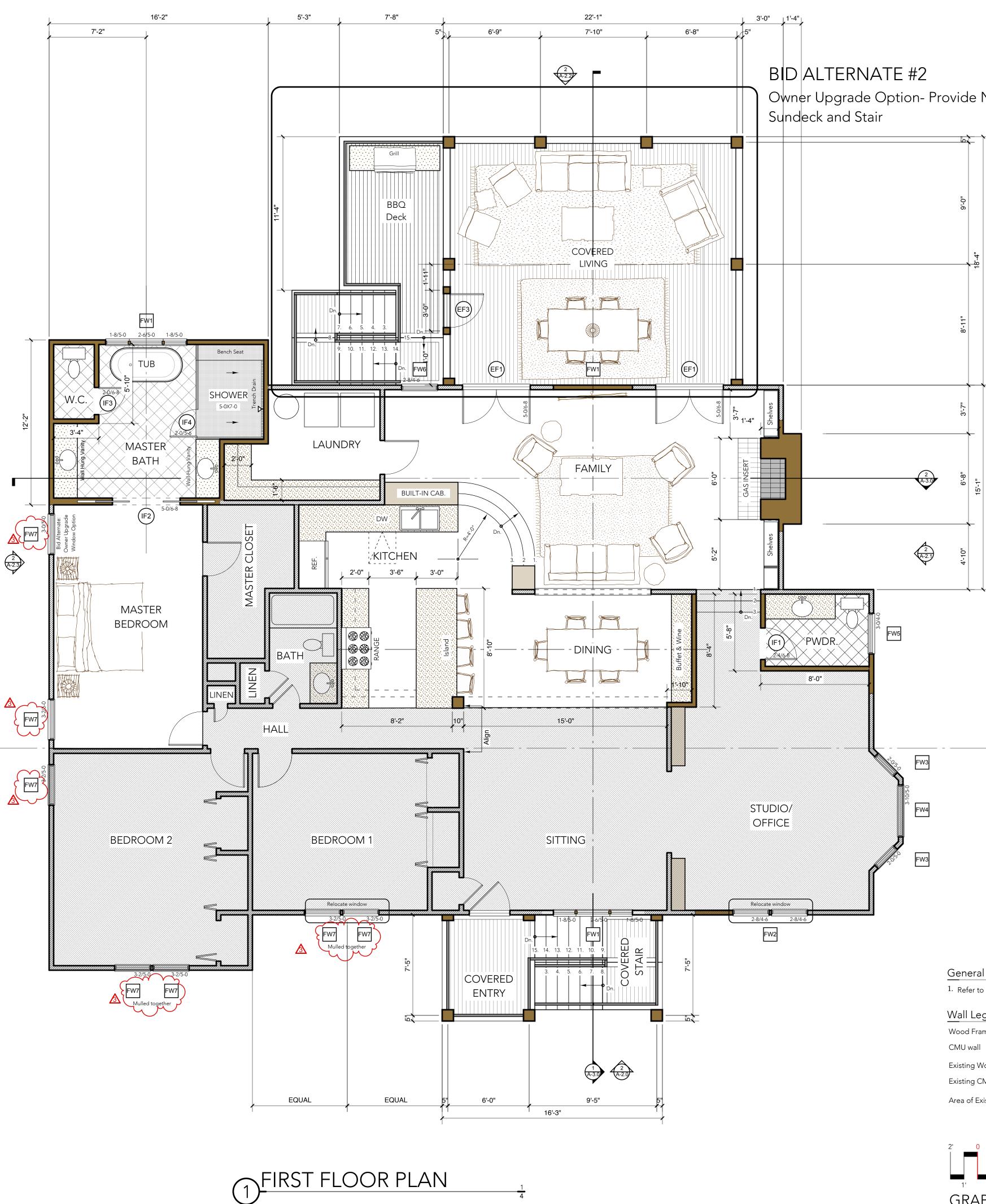






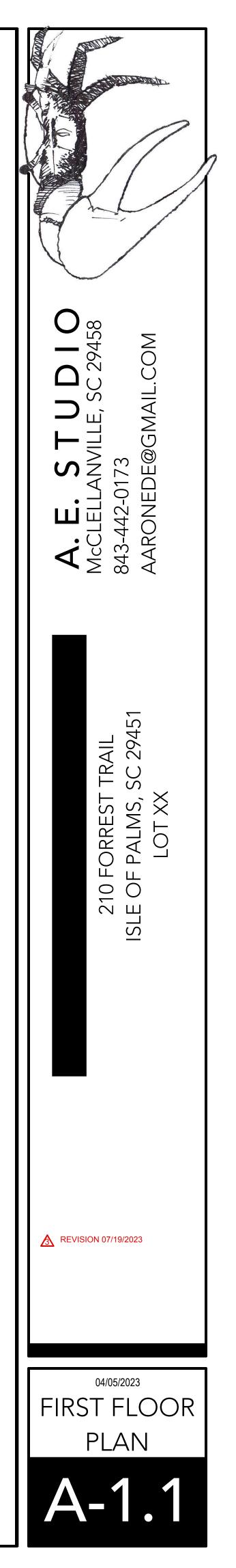
BID ALTERNATE #2

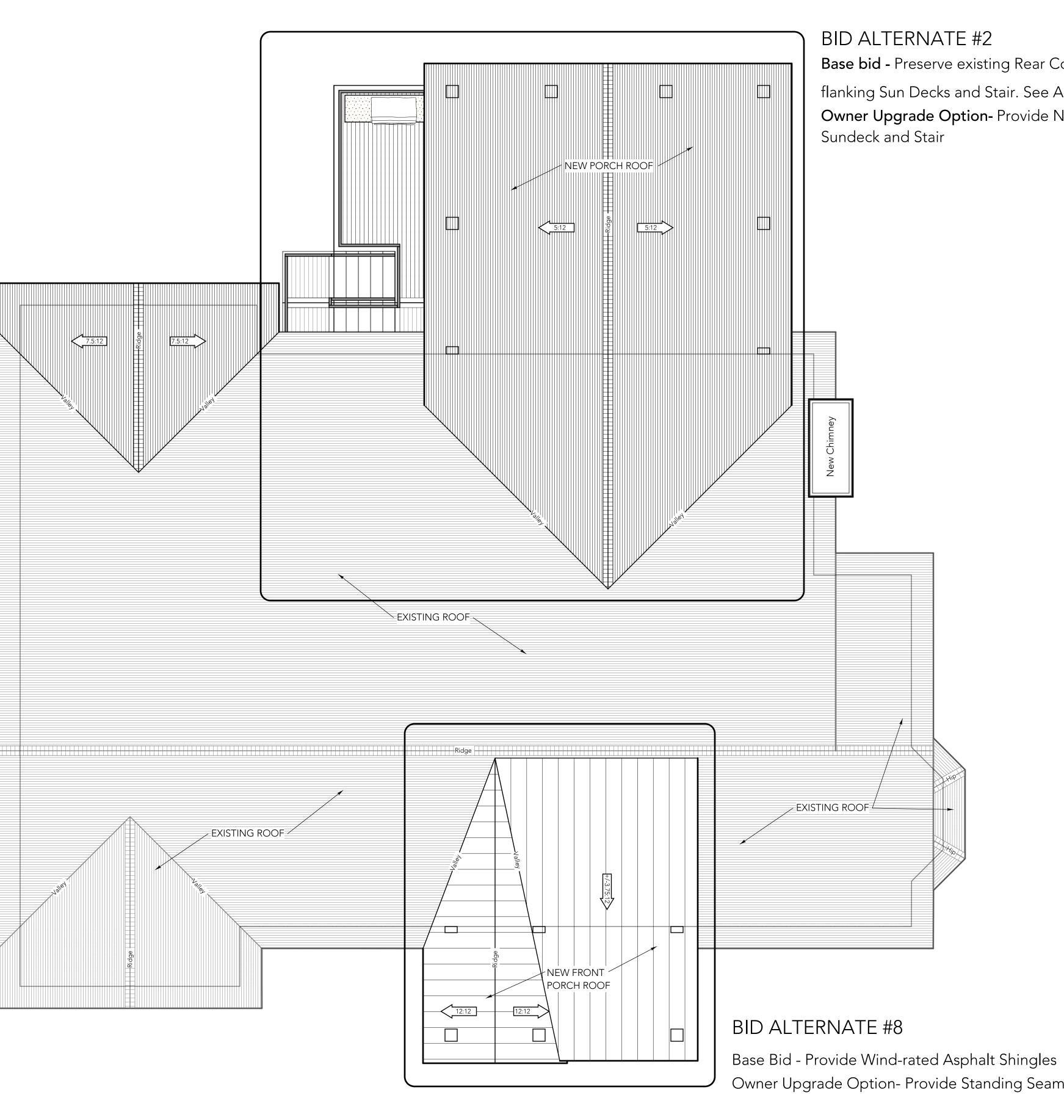
Base bid - Preserve existing Rear Covered Porch and provide flanking Sun Decks and Stair. See A-1.1



Owner Upgrade Option- Provide New Rear Covered Porch

<u>General Notes :</u> 1. Refer to Structural Drawings for all masonry wall and pier dimensions, Wall Legend : Wood Frame Existing Wood Frame Existing CMU wall Area of Existing Home GRAPHIC SCALE SCALE: 1/4" = 1'-0"



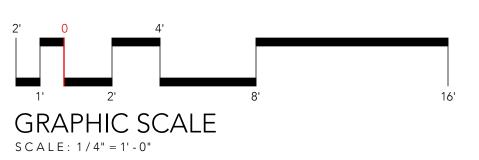


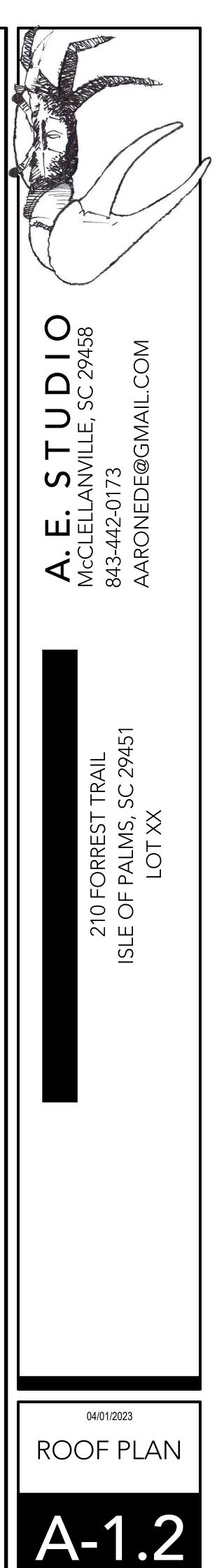


Base bid - Preserve existing Rear Covered Porch and provide flanking Sun Decks and Stair. See A-1.1

Owner Upgrade Option- Provide New Rear Covered Porch

Owner Upgrade Option- Provide Standing Seam Roof



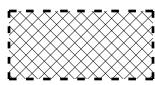


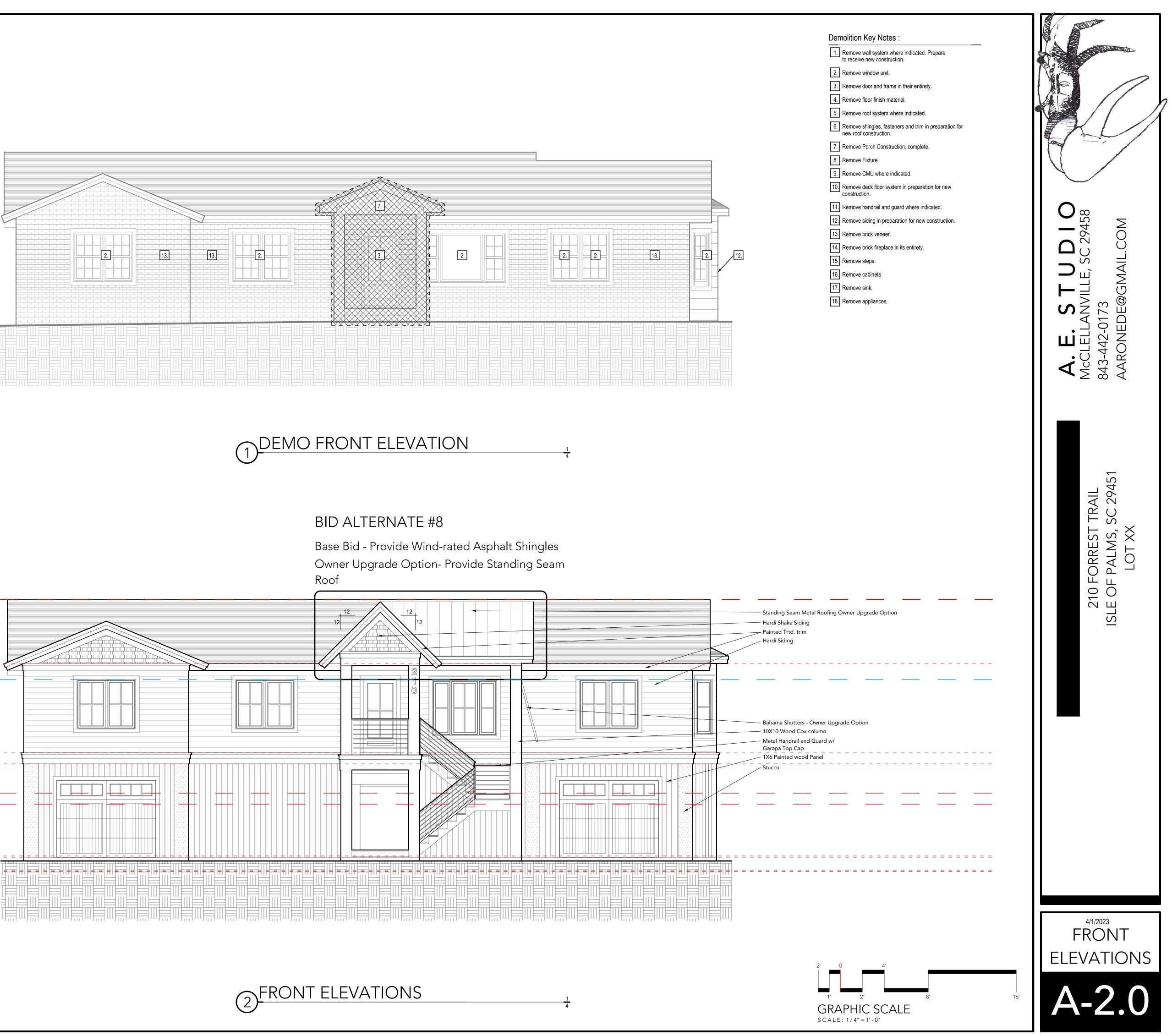
General Demolition Notes :

- 1. Contractor shall verify all dimensions and notify Architect of any discrepencies immediately.
- Contractor shall verify all wall construction types and notify Architect of any discrepancies immediately.
- Contractor shall protect necessary surfaces to avoid damage prior to demolition.
- 4. Items to be salvaged or reused shall be stored in a clean, dry, protected space away from construction activity.
- 5. Coordinate with Structural Engineering for extent of demolition.
- 6. Dashed lines indicate item to be removed.

Legend

Area of Work.

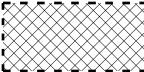


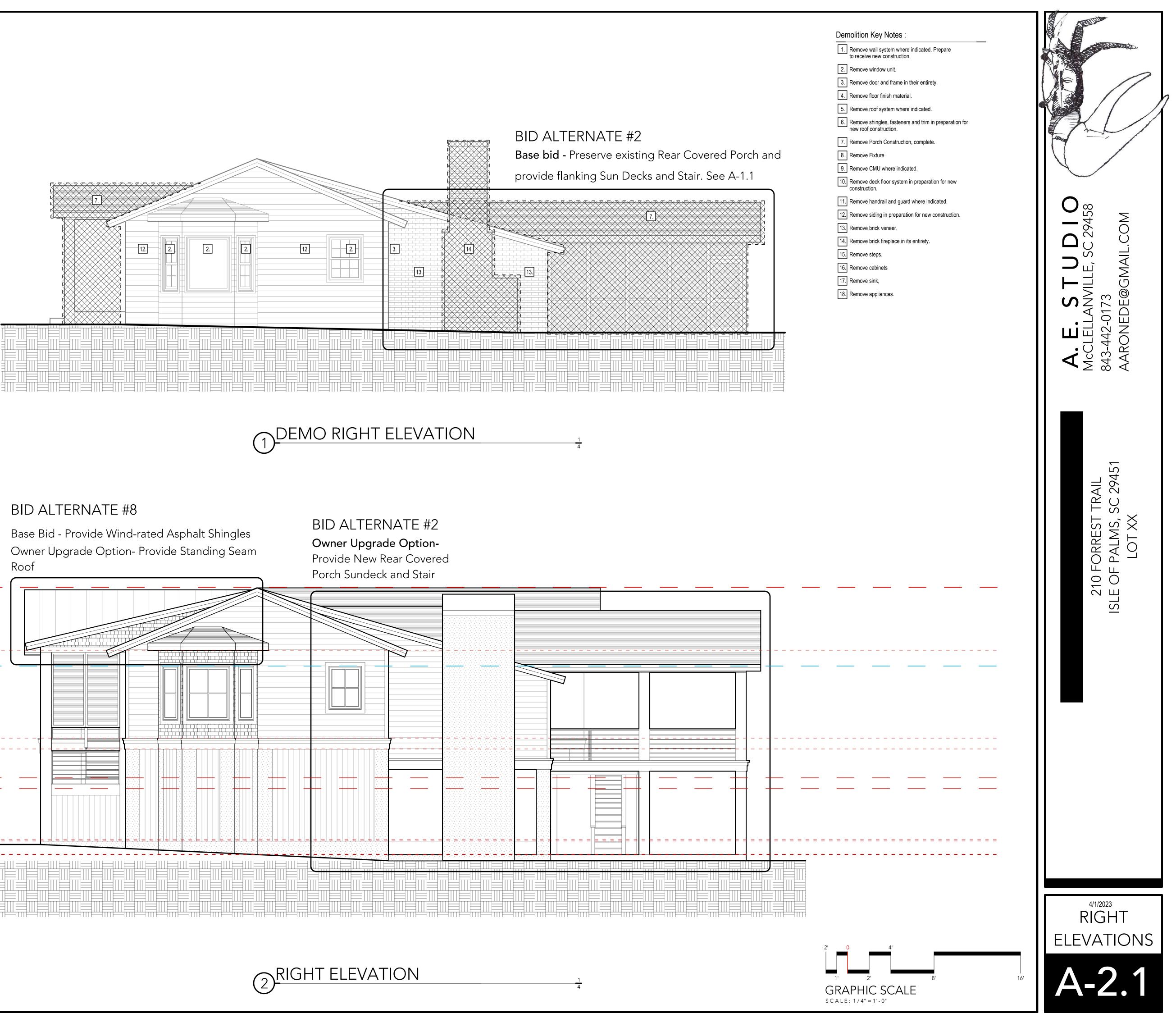


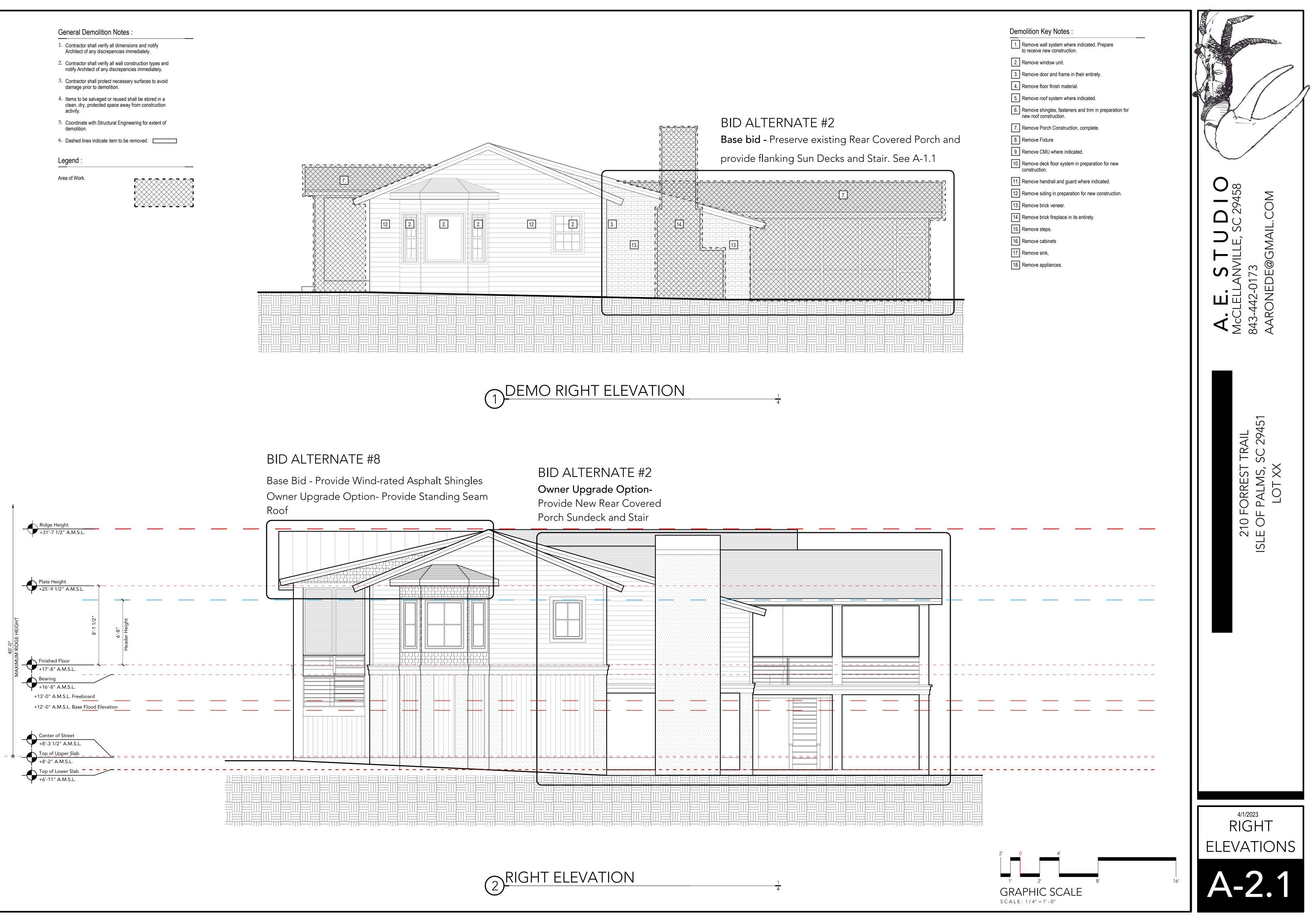




- activity.
- demolition.







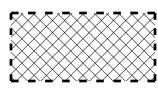
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ヽ <i>ヽ</i> ノレー			

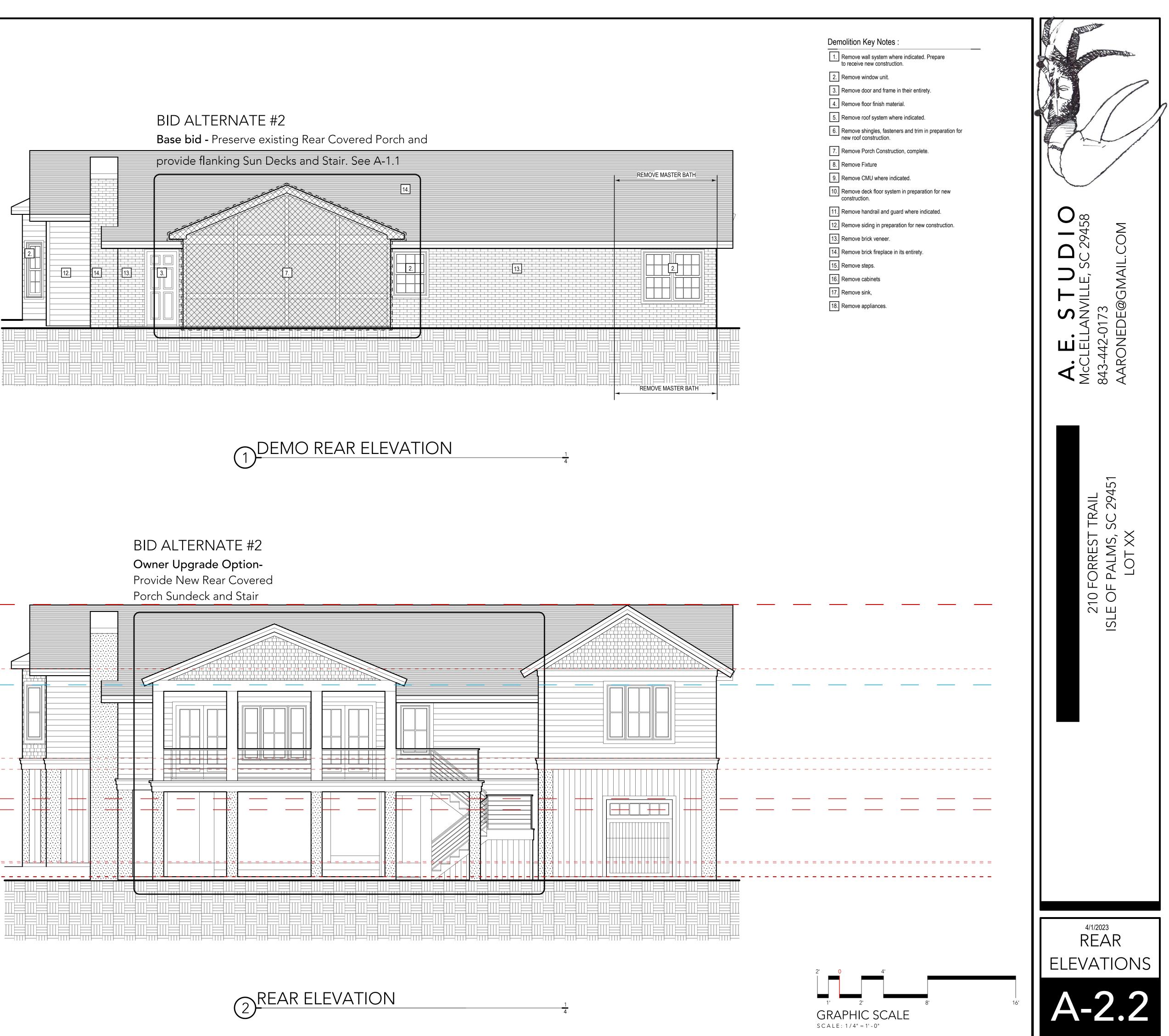
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Legend :

Area of Work.

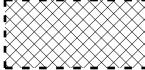


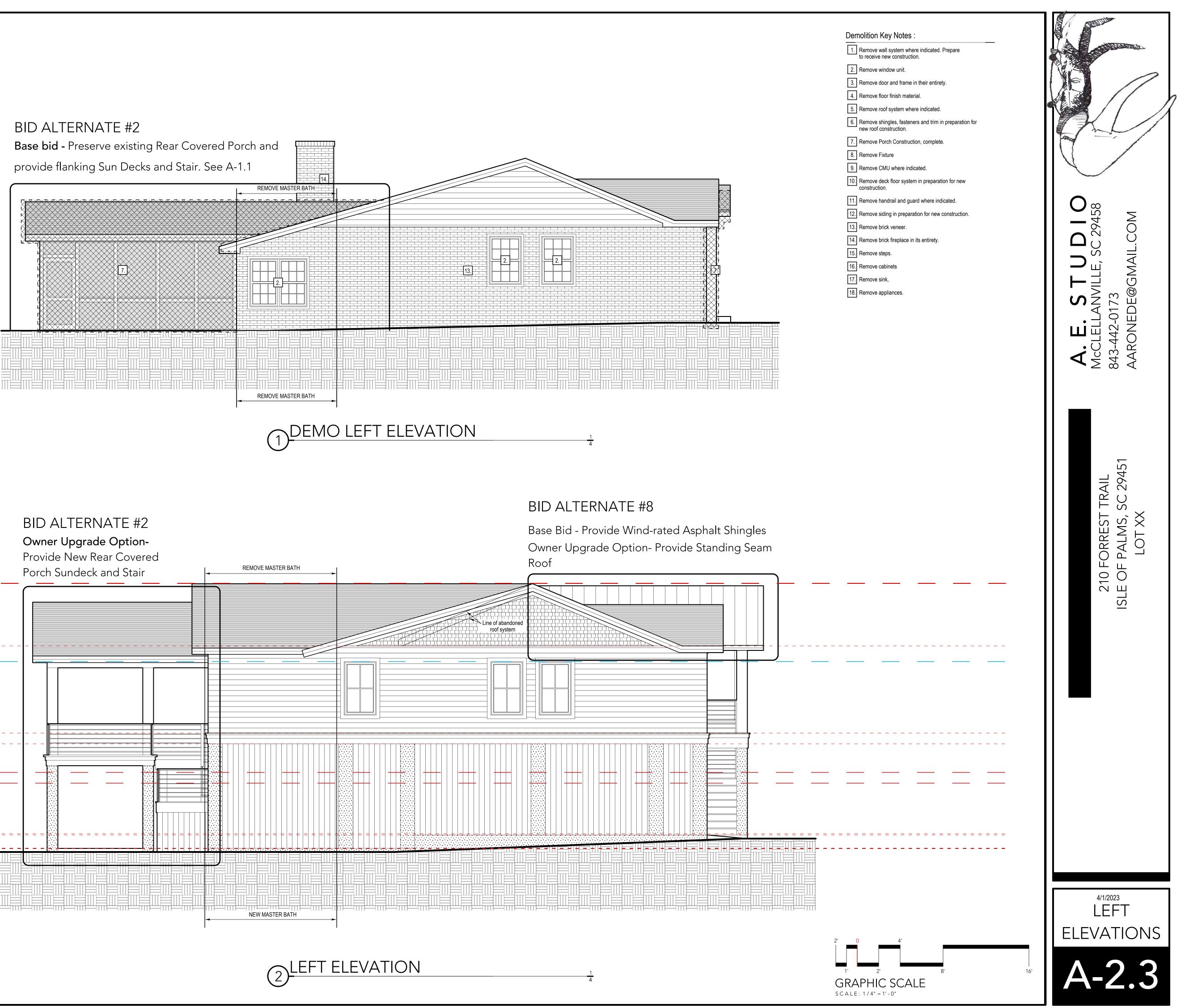


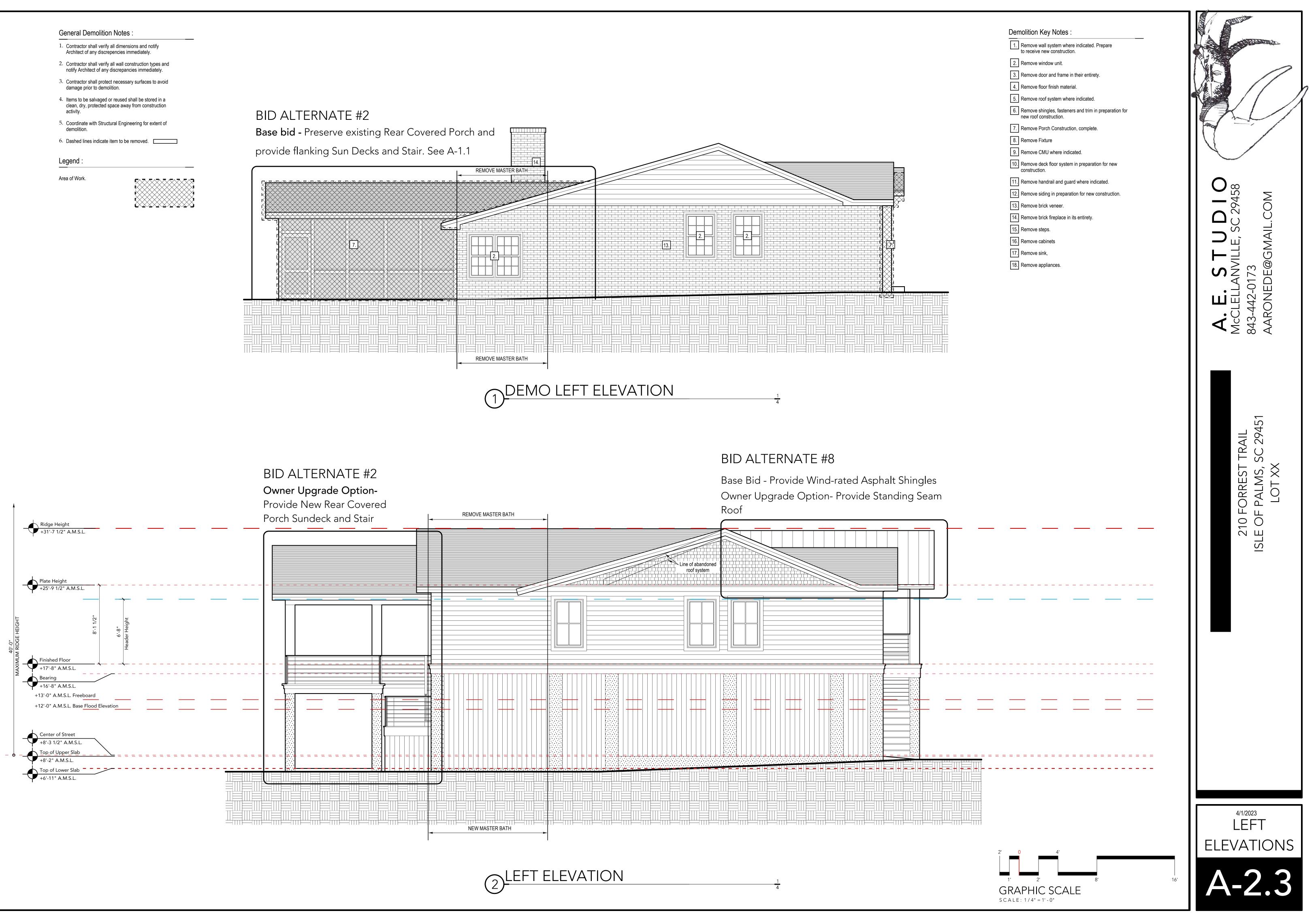


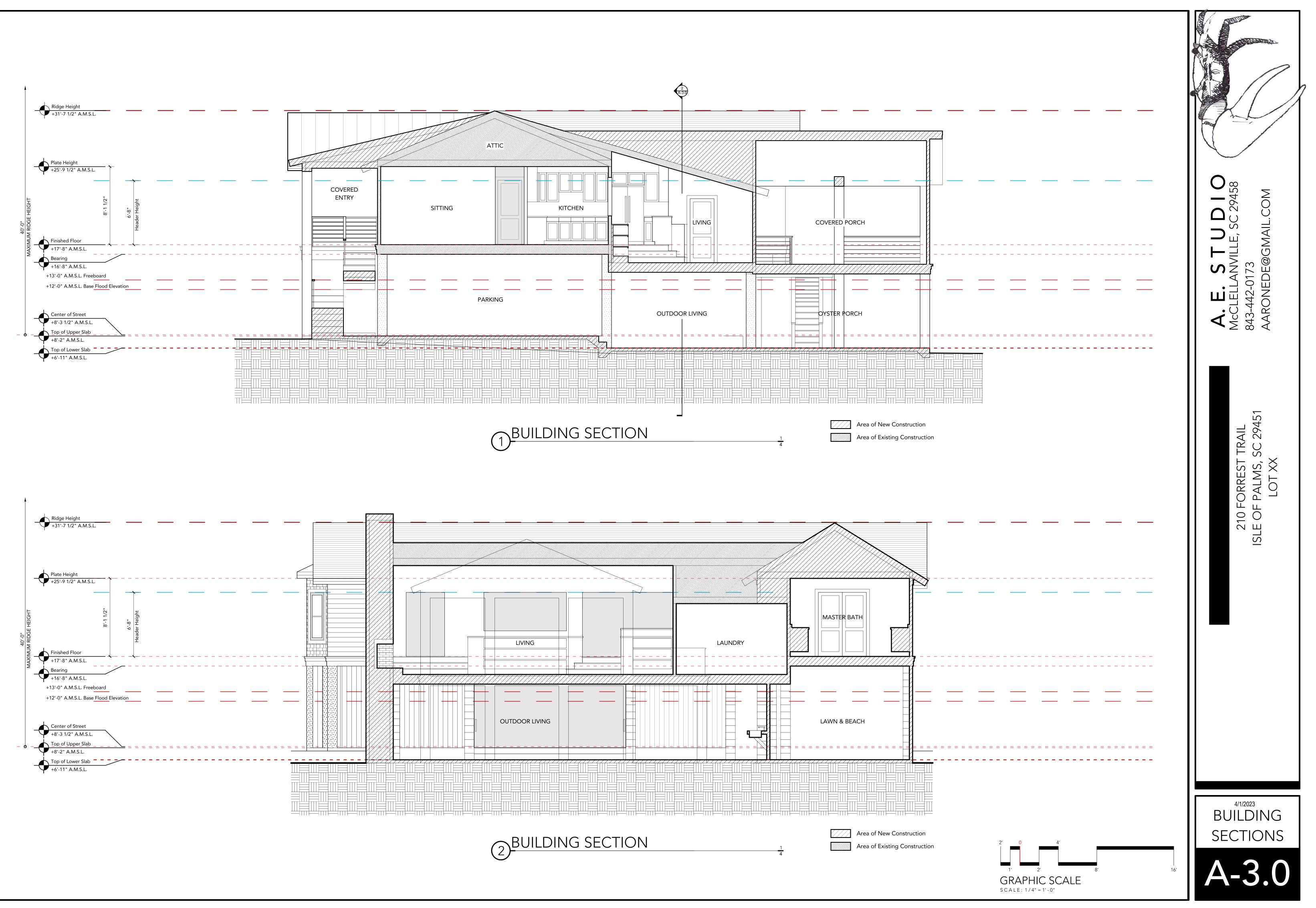


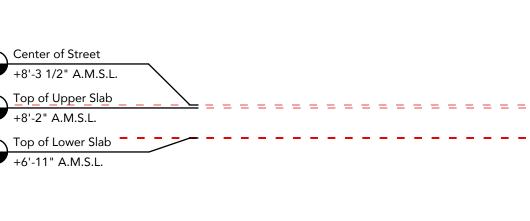
- activity.
- demolition.

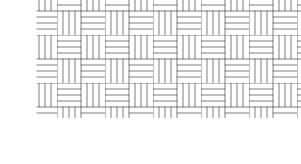


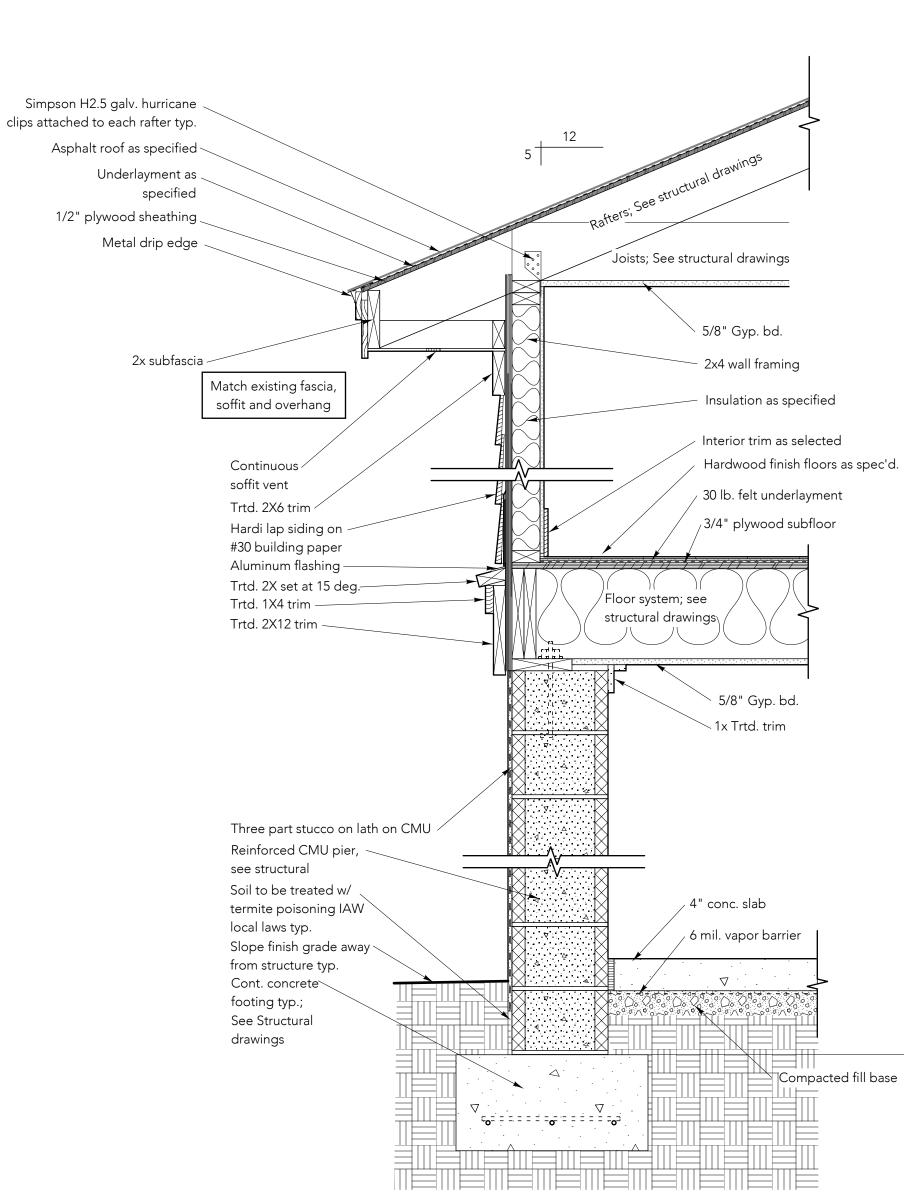






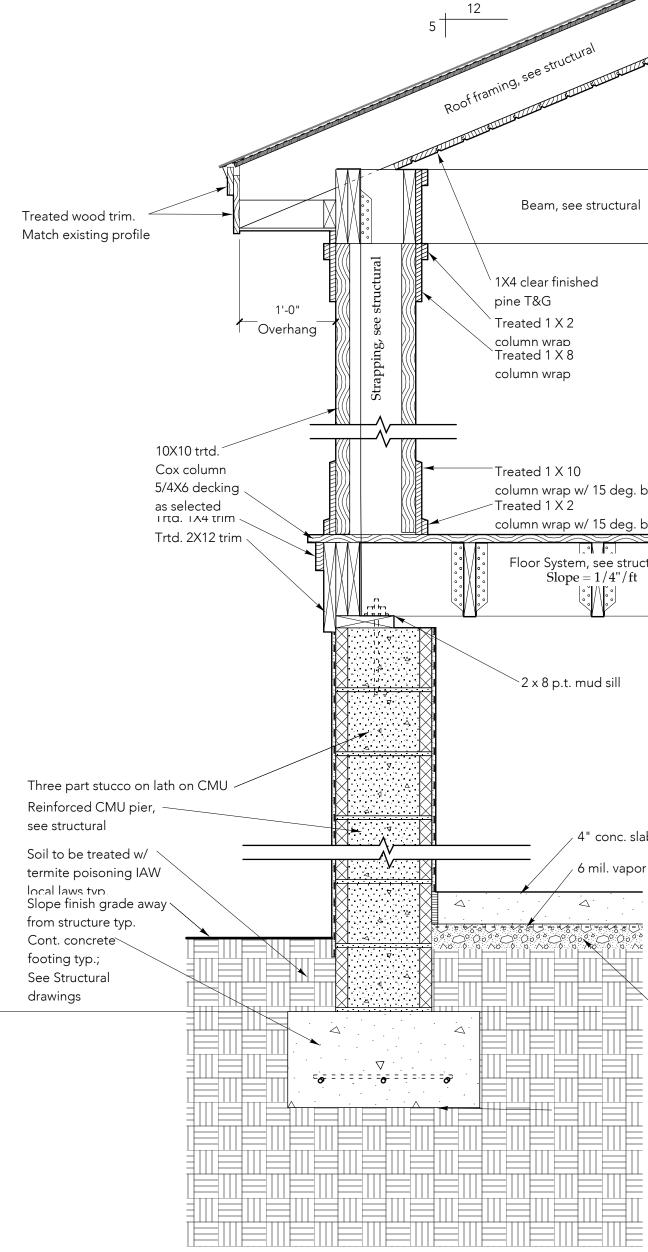




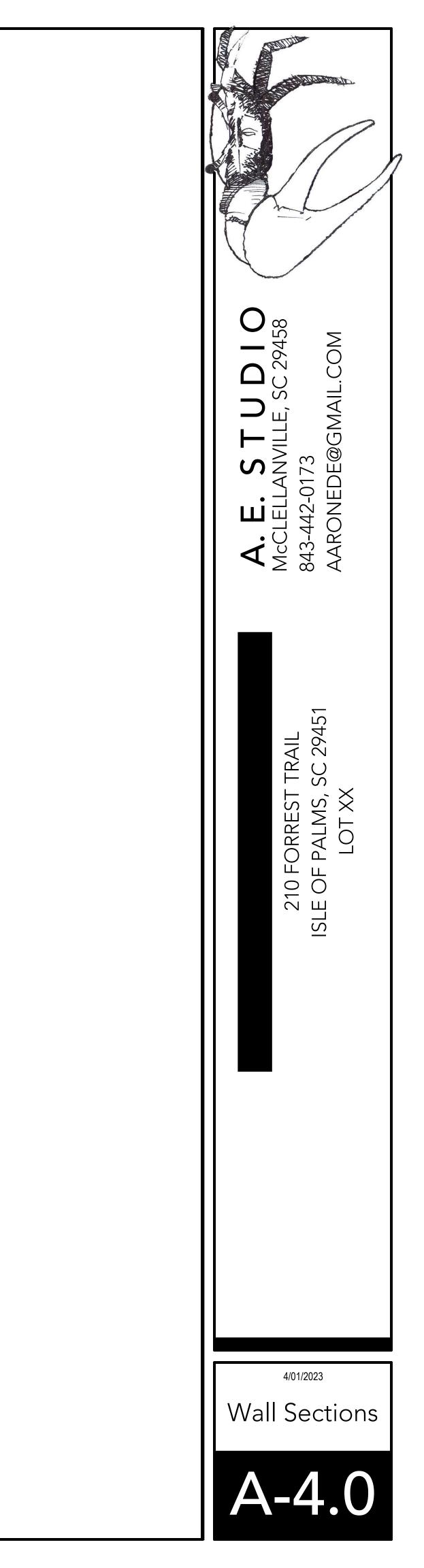


(1) WALL SECTION

Compacted fill base







2 x 8 p.t. mud sill

/ 4" conc. slab

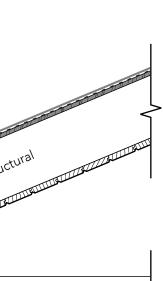
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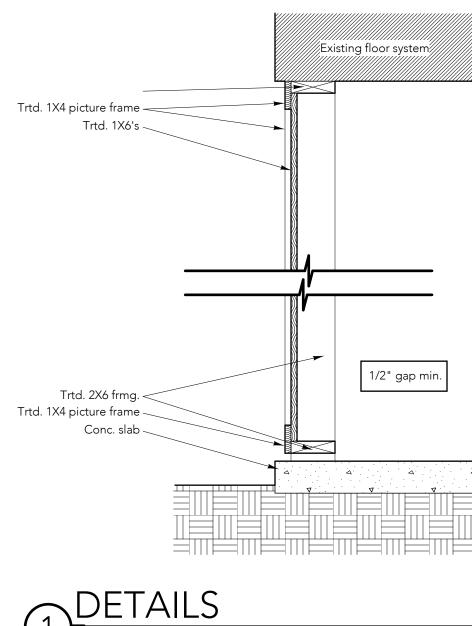
/ 6 mil. vapor barrier

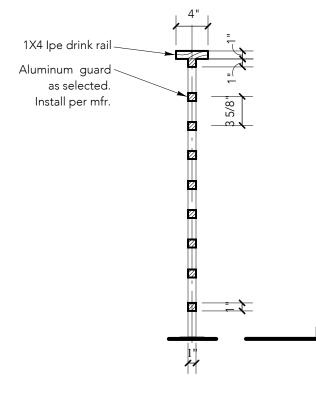
Compacted fill base

column wrap w/ 15 deg. bev Floor System, see structural Slope = 1/4"/ft

column wrap w/ 15 deg. bevel ⁄ Treated 1 X 2







Section





Extend flashi upward mini J

5 @ Side Walls

Siding per elevations 🦳

1/2" plywood sheathing-

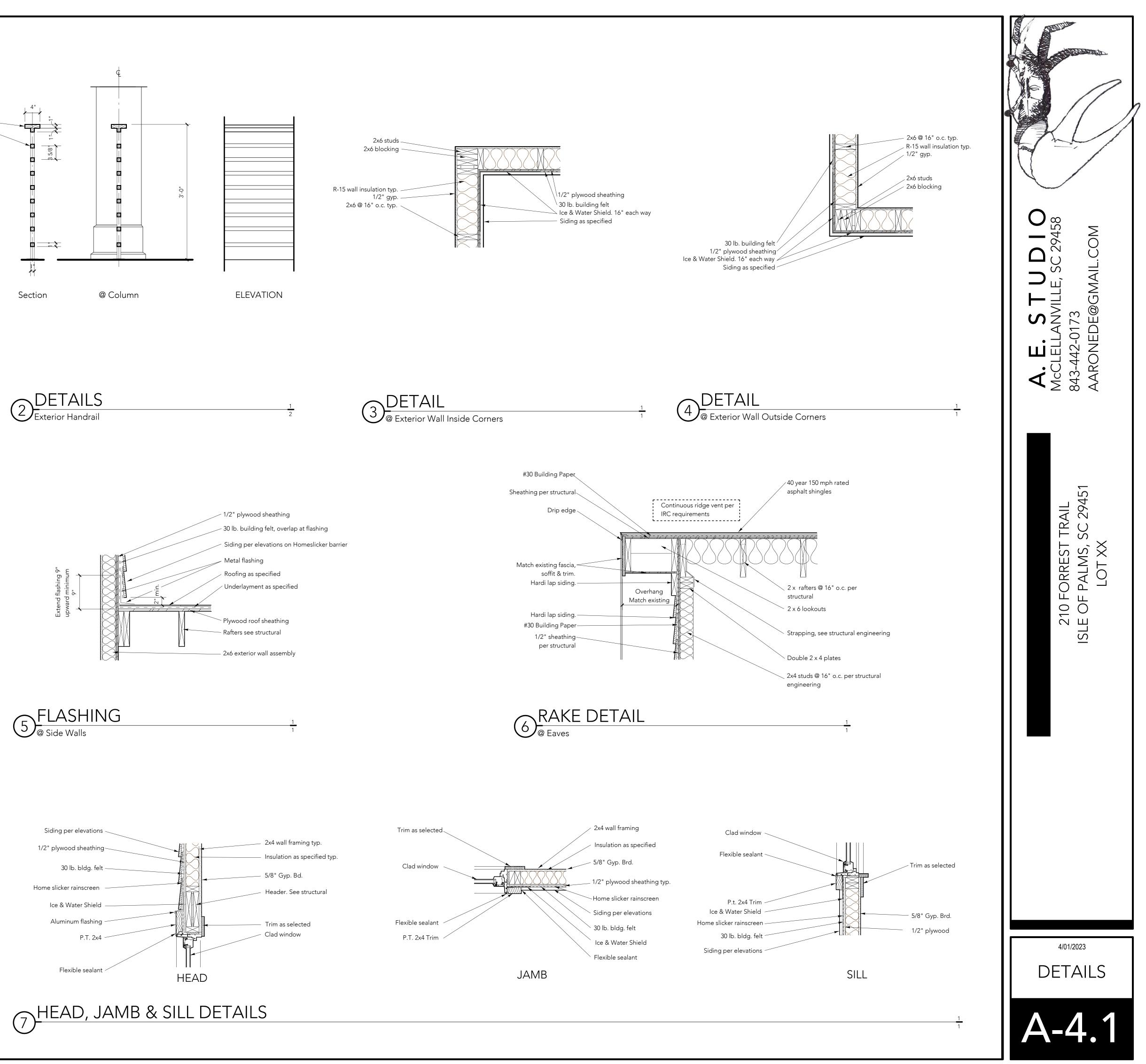
30 lb. bldg. felt —

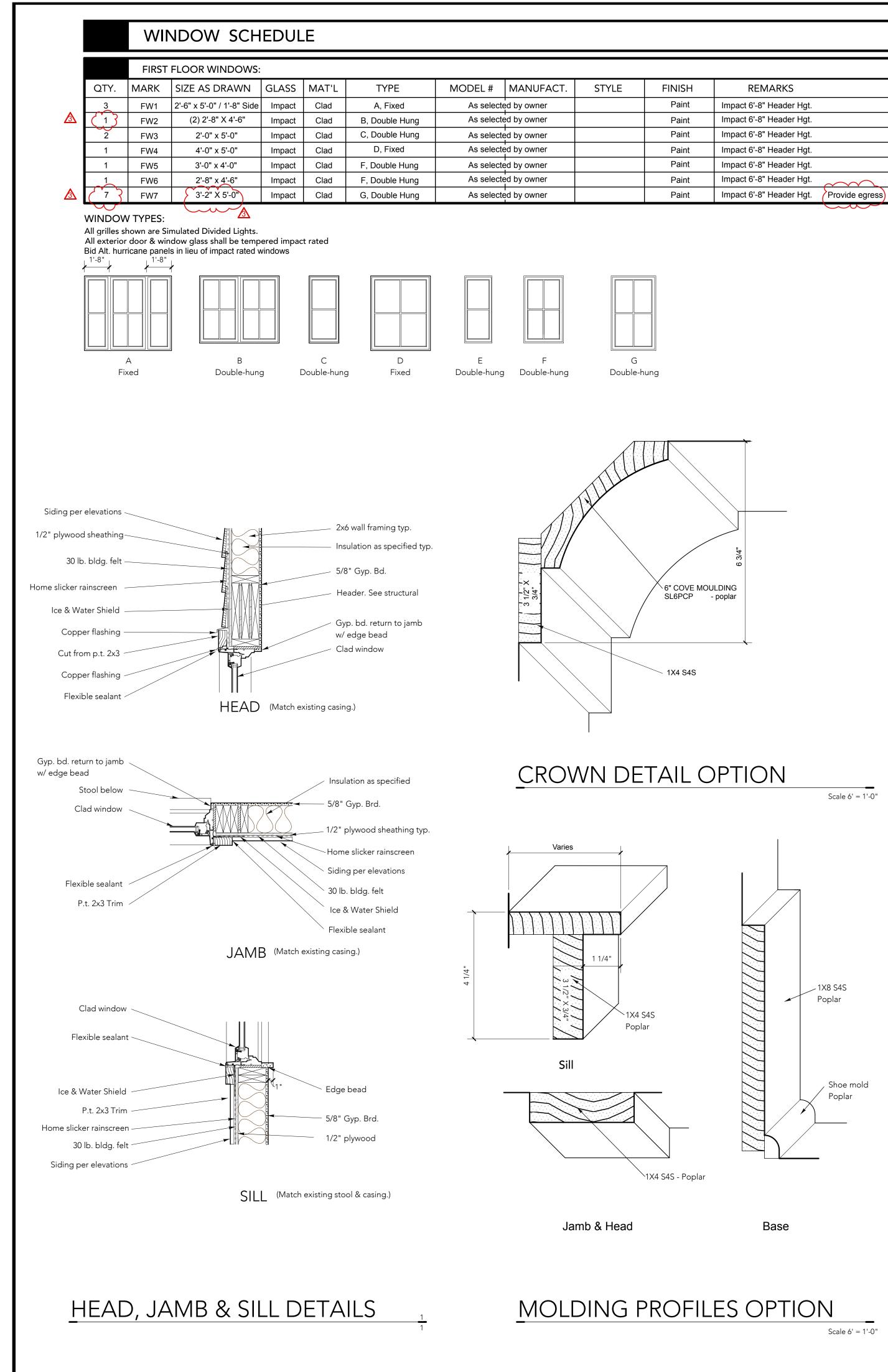
Home slicker rainscreen

Ice & Water Shield – Aluminum flashing —

Flexible sealant /







ISH	REMARKS
aint	Impact 6'-8" Header Hgt.
aint	Impact 6'-8" Header Hgt. Provide egress

	DOC	DR SCHEDI	JLE							
	GROUN	ND FLOOR DOORS	5:							
QTY.	MARK	SIZE	THICK.	TYPE	MATERIAL	STYLE	MANUFACT.	MODEL #	FINISH	REMARKS
2	EGI	9'-0" x 7'-0"	1 3/4"	A, Overh.			Wayne Dalton			
1	EG2	4'-0" x 7'-0"	1 3/4"	B, Hinged	Aluminum		As selected			
1	EG3	3'-0" x 7'-0"	1 3/4"	C, Hinged	Steel	Match existg.	Thermatru		Paint	
							Wayne Dalton			
1	EG4	6'-0" x 7'-0"	1 3/4"	D, Overh.	Aluminum		Wayne Dallon			
1	EG4	6'-0" x 7'-0" 6' NOT USED (2)	1 3/4" <u>1 3/4</u> "	D, Overh. E, Hinged	Aluminum Composite	Match existg.	Masonite		Paint	
	IG1					Match existg.	-		Paint	
1 1 QTY.	IG1	8' NOT USED (2)				Match existg.	-	MODEL #	FINISH	REMARKS
	IG1 FIRST F	8'NOT USED<u>(2)</u> LOOR DOORS:	1 3/4"	E, Hinged	Composite	STYLE	Masonite	MODEL #		REMARKS
QTY.	ig1 FIRST F MARK	8'NOT USED(2) LOOR DOORS: SIZE	1 3/4" THICK.	E, Hinged	Composite MATERIAL	STYLE As selecte	Masonite MANUFACT.	MODEL #		
QTY.	IG1 FIRST F MARK EF1	8'NOT USED(2) FLOOR DOORS: SIZE 5'-0" X 6'-8"	1 3/4" THICK. 1 3/4"	E, Hinged TYPE F, Hinged	Composite MATERIAL Clad	STYLE As selecte	Masonite MANUFACT.	MODEL #		Impact
QTY.	IG1 FIRST F MARK EF1	8'NOT USED(2) FLOOR DOORS: SIZE 5'-0" X 6'-8"	1 3/4" THICK. 1 3/4"	E, Hinged TYPE F, Hinged	Composite MATERIAL Clad	STYLE As selecte	Masonite MANUFACT.	MODEL #		Impact
QTY. 2 1	IG1 FIRST F MARK EF1 EF2	8'NOT USED(2) ELOOR DOORS: SIZE 5'-0" X 6'-8" 2'-8" X 6'-8"	1 3/4" THICK. 1 3/4" 1 3/4"	E, Hinged TYPE F, Hinged G, French	Composite MATERIAL Clad Clad	STYLE As selecte As selecte	Masonite MANUFACT.	MODEL #	FINISH	Impact
QTY. 2 1	IG1 FIRST F MARK EF1 EF2 IF1	8'NOT USED(2) ELOOR DOORS: SIZE 5'-0" X 6'-8" 2'-8" X 6'-8" 2'-4" x 6'-8"	1 3/4" THICK. 1 3/4" 1 3/4" 1 3/4"	E, HingedTYPEF, HingedG, FrenchH, Pocket	Composite MATERIAL Clad Clad Composite	STYLE As selecte As selecte Match existg.	Masonite MANUFACT.	MODEL #	FINISH	Impact

DOOR TYPES:

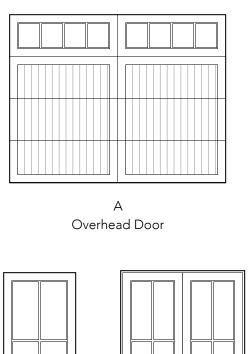
Front Entry

All grilles shown are Simulated Divided Lights.

All exterior door glass shall be tempered impact rated

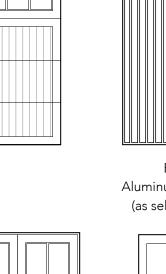
Bid Alt. hurricane panels in lieu of impact rated windows

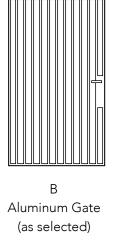


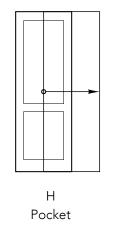


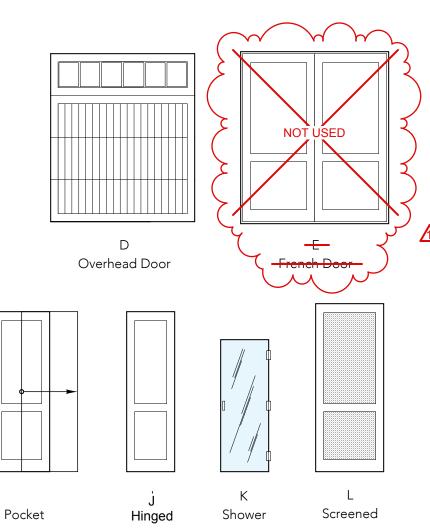
G

French



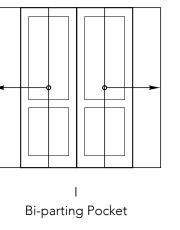


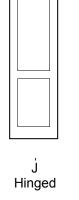


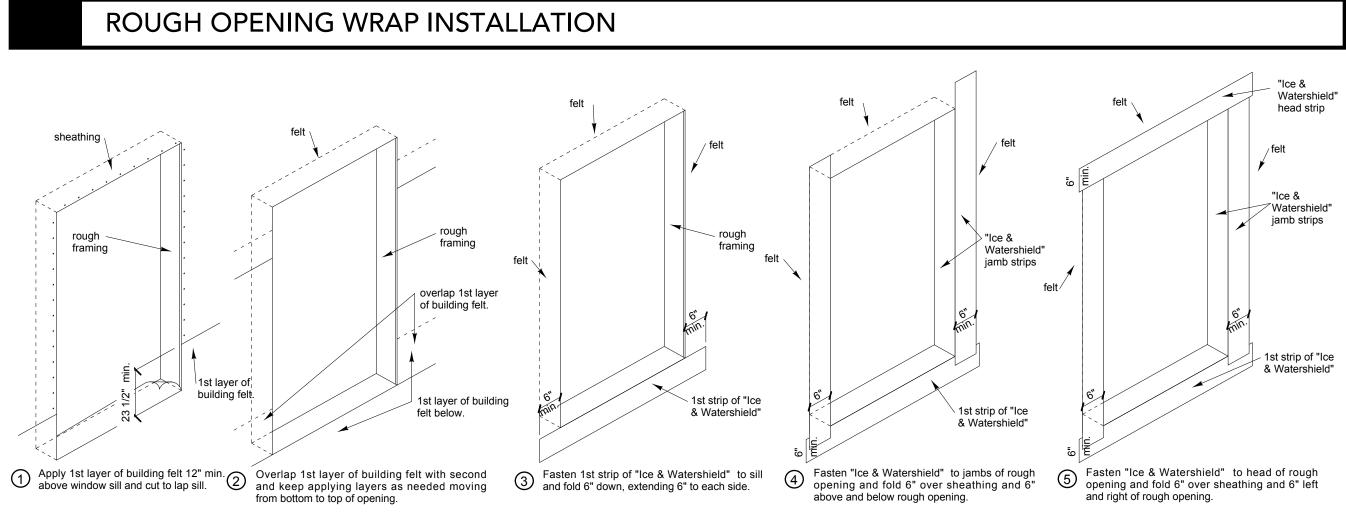








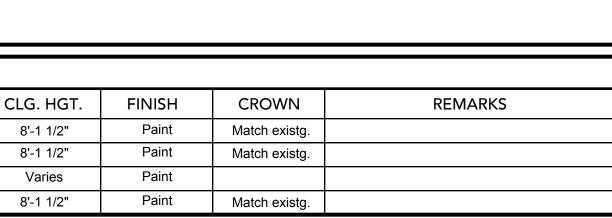


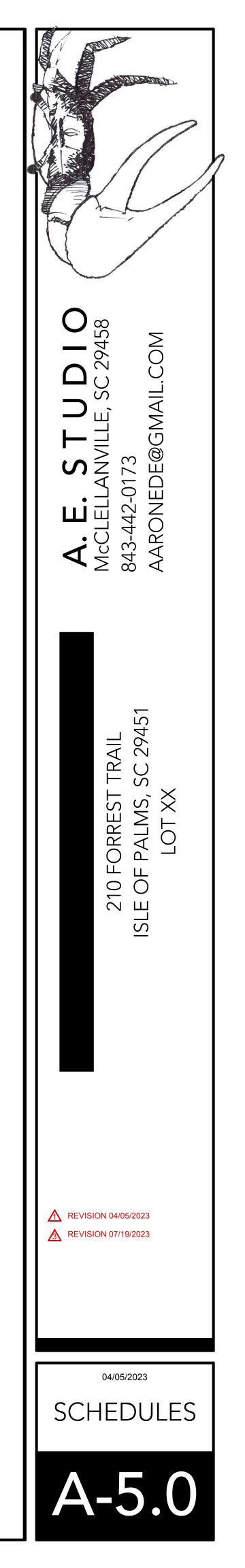


- Windows and doors shall have a minimum DP50 rating. - Contractor shall provide removeable impact panels or windows with impact glass.

ROOM FINISH SCHEDULE

						,
	GROUND FLOOR SPACES:					
DETAIL	MARK	SPACE	FLOORS	WALLS	CEILINGS	C
		Kitchen	Hd. wd. Match Existg.	Gyp. Bd.	Gyp. Brd.	
		Living	Hd. wd. Match Existg.	Gyp. Bd.	Gyp. Brd.	
		Front & Rear Porches	5/4" Decking as selected		V-groove	
		Master Bath	Tile as selected	Gyp. Bd.	Gyp. Brd.	

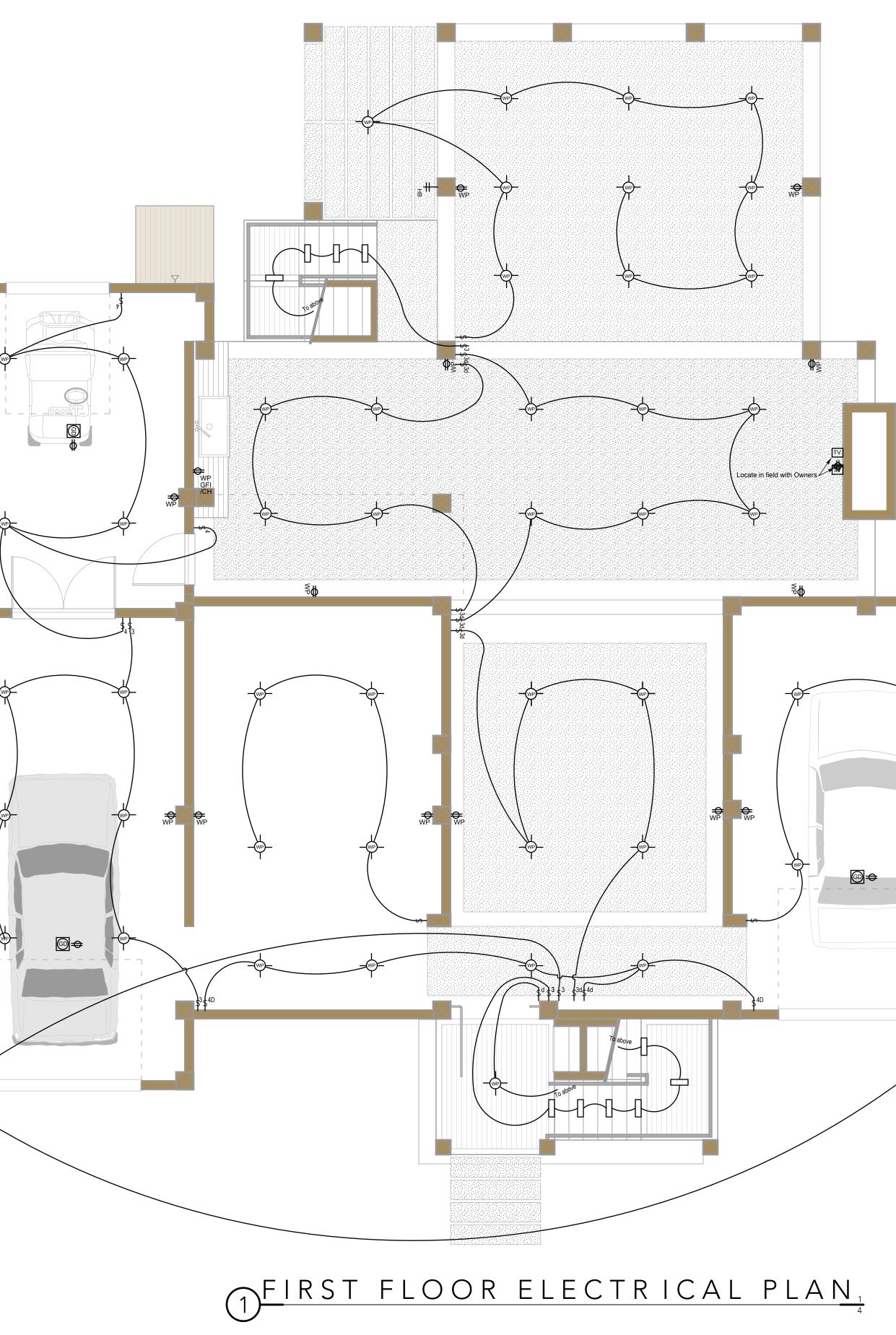


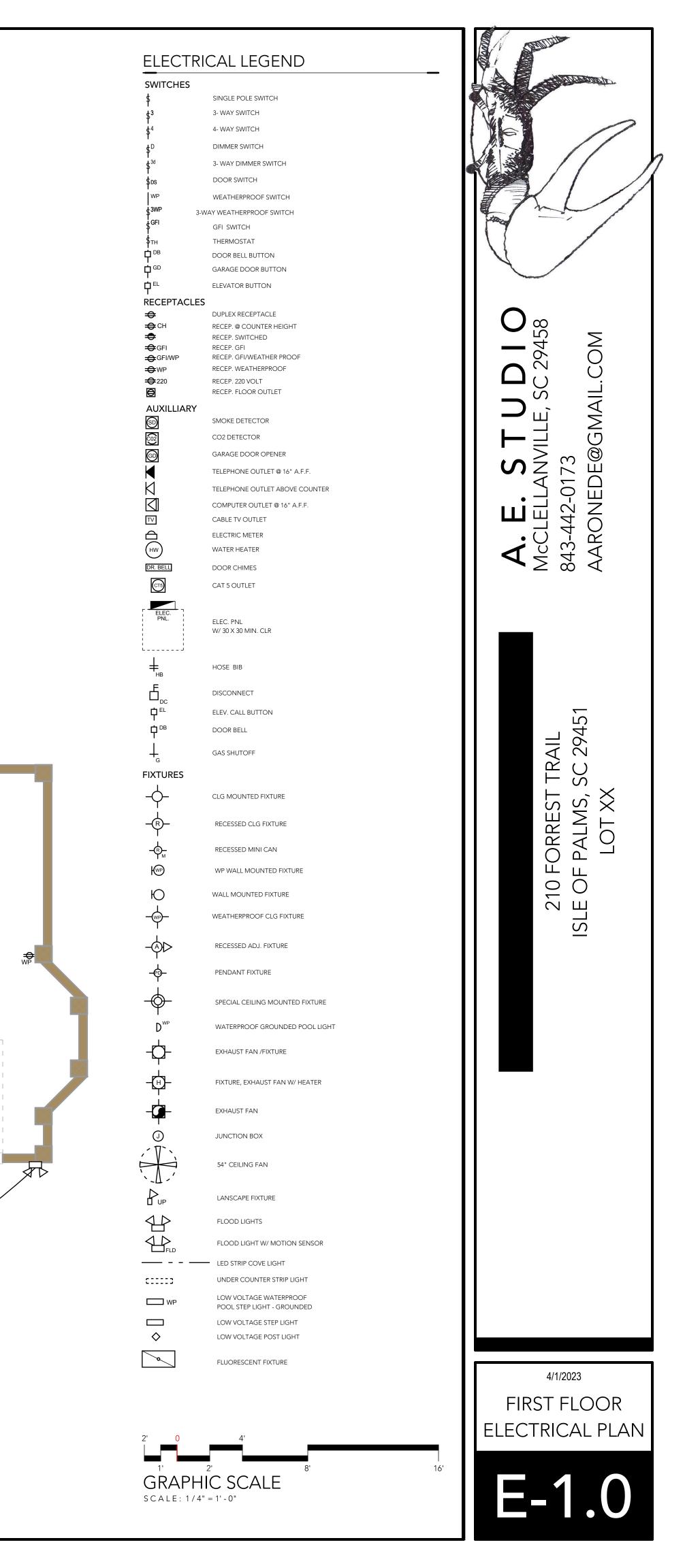


OWP -@-) _ _ _

ELECTRICAL NOTES

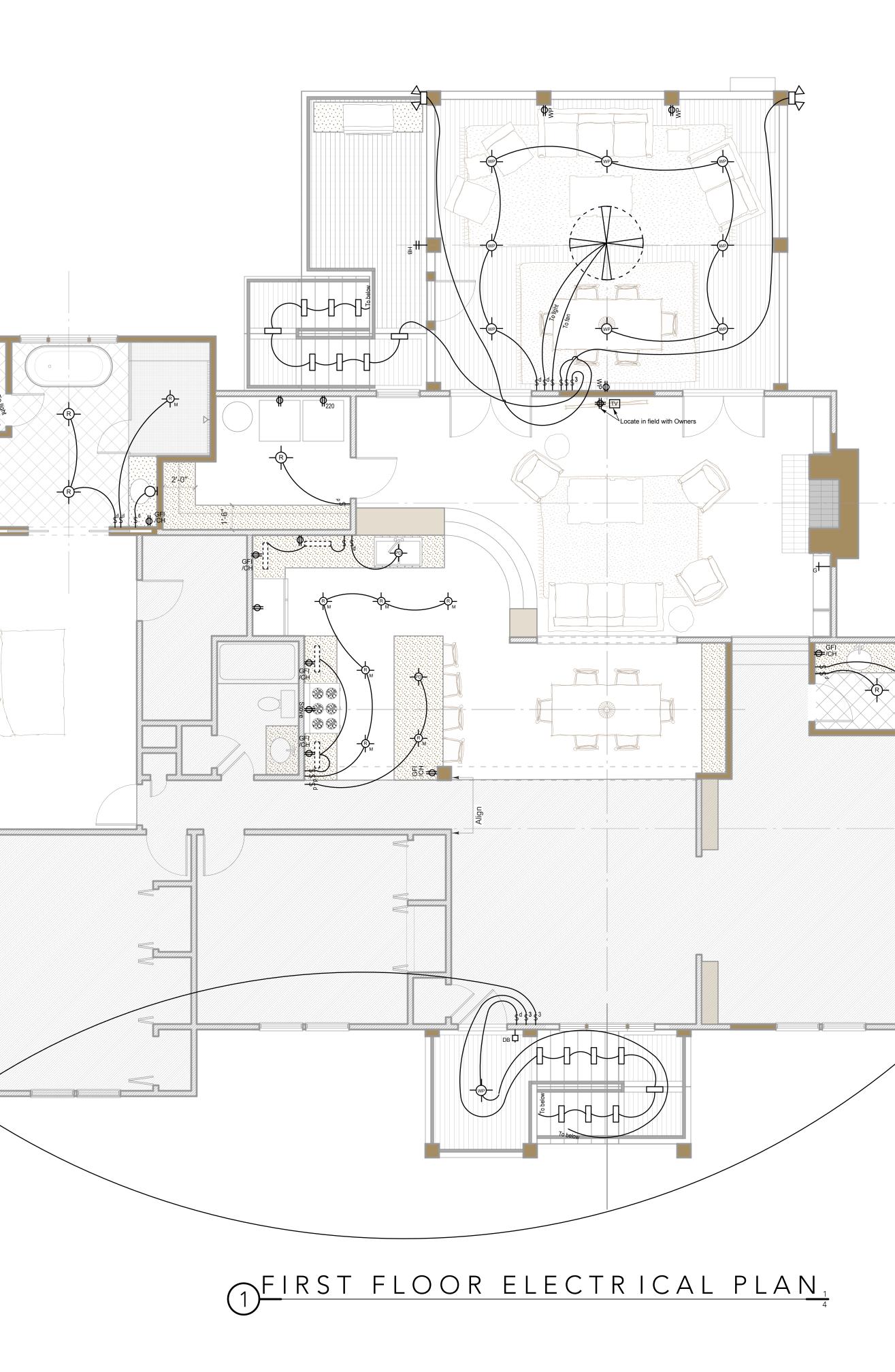
- 1. CONTRACTOR SHALL ADHERE TO ALL PERTINENT NATIONAL, STATE AND LOCAL CODES.
- 2. DIMMER AND SWITCH LOCATIONS TO BE COORDINATED W/ OWNER IN FIELD.
- 3. FIXTURES SHALL BE APPROVED BY OWNER PRIOR TO INSTALLATION.
- 4. ELECTRICAL CONTRACTOR SHALL PROVIDE SERVICE TO ALL EQUIPMENT INSTALLED
- 5. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF OUTLETS, LIGHTS, AND SWITCHES WITH OWNER PRIOR TO INSALLATION.
- 7. ALL ELECTRICAL FIXTURES AND EQUIPMENT SHALL BE GROUNDED. ALL CONVENIENCE
- RECEPTACLES SHALL BE GROUNDING TYPE. 8. CONTRACTOR SHALL CLEARLY MARK ELECTRICAL PANEL SCHEDULE
- 9. SWITCHES SHALL BE MOUNTED @ 42" AFF ULESS NOTED OTHERWISE.
- 10. RECEPTACLES SHALL BE MOUNTED ABOVE BFE OR @ 16" MIN. AFF ULESS NOTED OTHERWISE.
- 11. SWITCHES, RECEPTACLES & JUNCTION BOXES SHALL BE FLUSH MOUNTED.
- 12. CONTRACTOR SHALL PROVIDE WATERPROOF EQUIPMENT BELOW BFE.

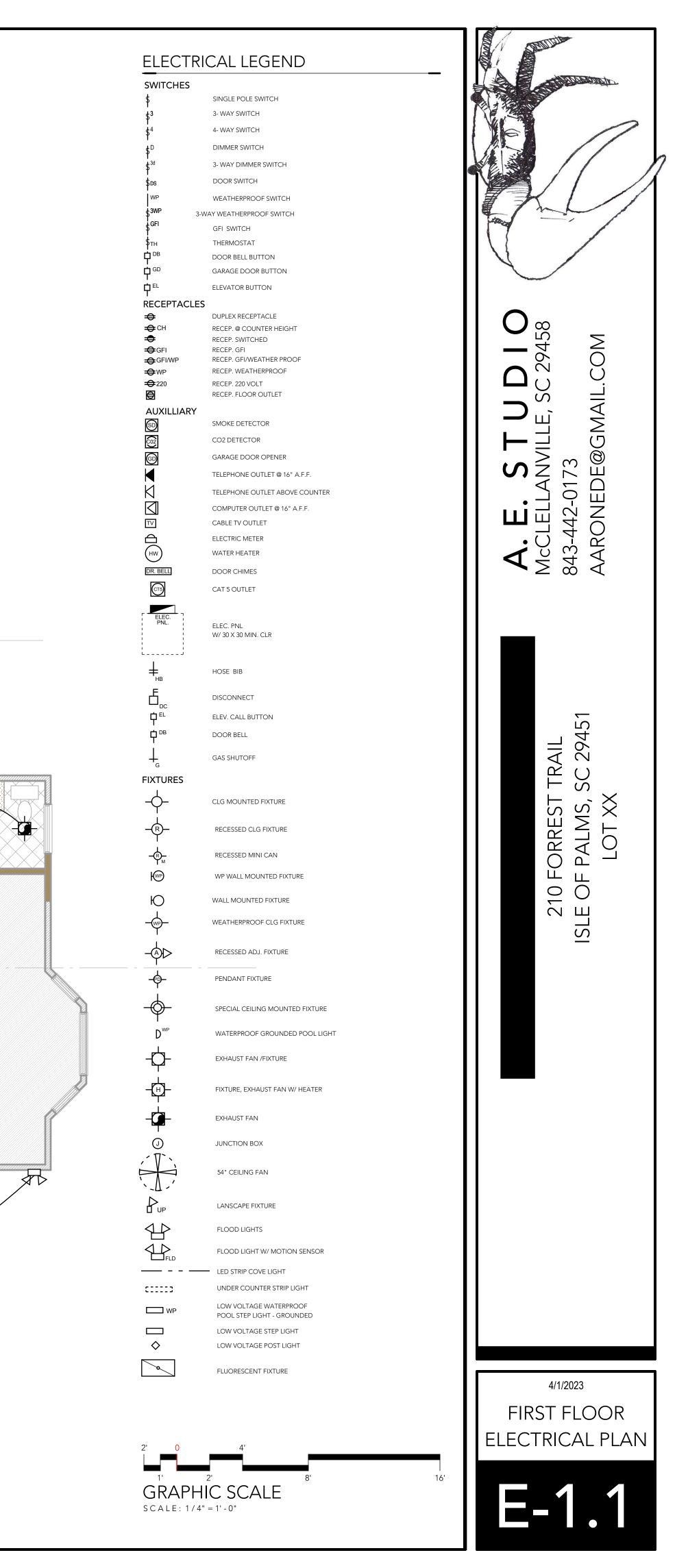


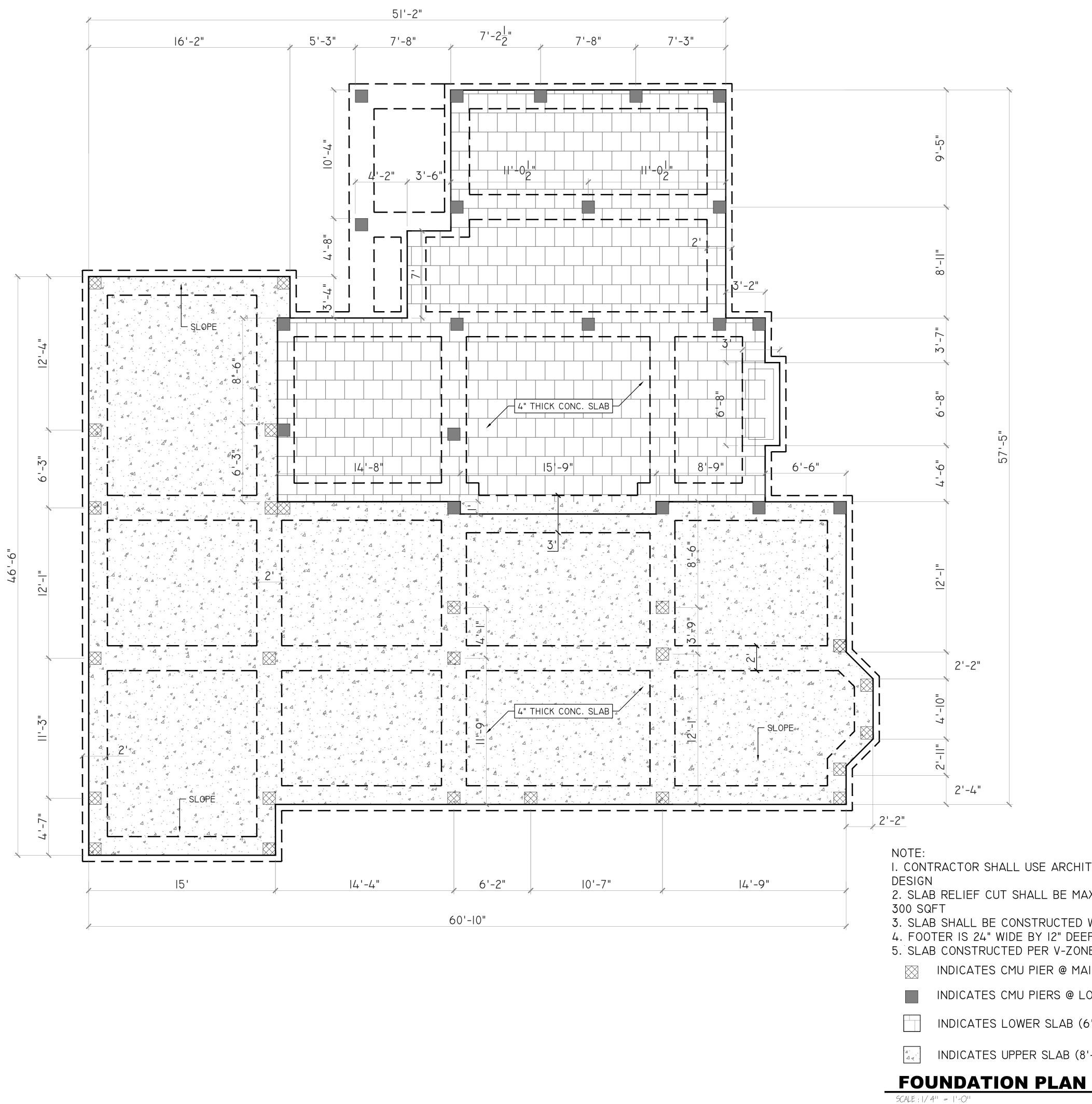


ELECTRICAL NOTES

- 1. CONTRACTOR SHALL ADHERE TO ALL PERTINENT NATIONAL, STATE AND LOCAL CODES.
- 2. DIMMER AND SWITCH LOCATIONS TO BE COORDINATED W/ OWNER IN FIELD.
- 3. FIXTURES SHALL BE APPROVED BY OWNER PRIOR TO INSTALLATION.
- 4. ELECTRICAL CONTRACTOR SHALL PROVIDE SERVICE TO ALL EQUIPMENT INSTALLED
- 5. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF OUTLETS, LIGHTS, AND SWITCHES WITH OWNER PRIOR TO INSALLATION.
- 7. ALL ELECTRICAL FIXTURES AND EQUIPMENT SHALL BE GROUNDED. ALL CONVENIENCE
- RECEPTACLES SHALL BE GROUNDING TYPE. 8. CONTRACTOR SHALL CLEARLY MARK ELECTRICAL PANEL SCHEDULE
- 9. SWITCHES SHALL BE MOUNTED @ 42" AFF ULESS NOTED OTHERWISE.
- 10. RECEPTACLES SHALL BE MOUNTED ABOVE BFE OR @ 16" MIN. AFF ULESS NOTED OTHERWISE.
- SWITCHES, RECEPTACLES & JUNCTION BOXES SHALL BE FLUSH MOUNTED.
 CONTRACTOR SHALL PROVIDE WATERPROOF EQUIPMENT BELOW BFE.







INDICATES UPPER SLAB (8'-2" AMSL)

INDICATES LOWER SLAB (6'-II" AMSL)

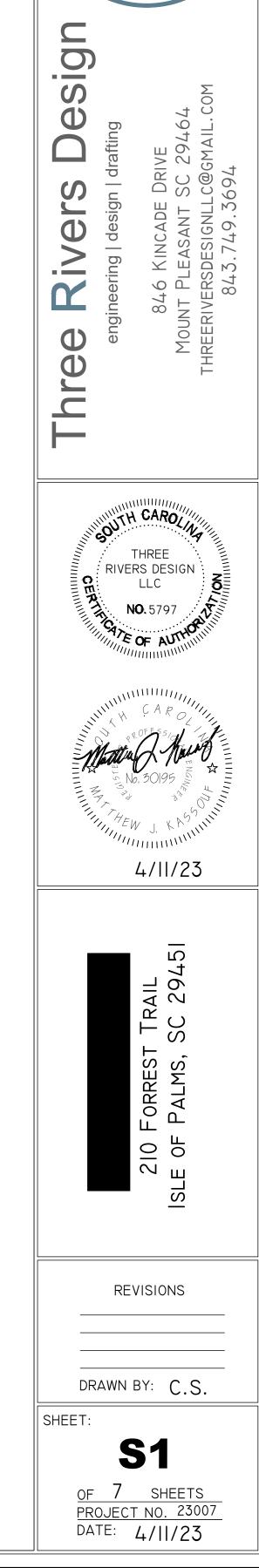
INDICATES CMU PIERS @ LOWER FLOOR ELEVATION

5. SLAB CONSTRUCTED PER V-ZONE REQUIREMENTS FOR COASTAL A ZONE INDICATES CMU PIER @ MAIN LEVEL FFE

3. SLAB SHALL BE CONSTRUCTED WITH 3000 PSI FIBER MESH CONCRETE 4. FOOTER IS 24" WIDE BY 12" DEEP U.N.O.

2. SLAB RELIEF CUT SHALL BE MAX 15' O.C. OR PANEL SIZE NOT TO EXCEED

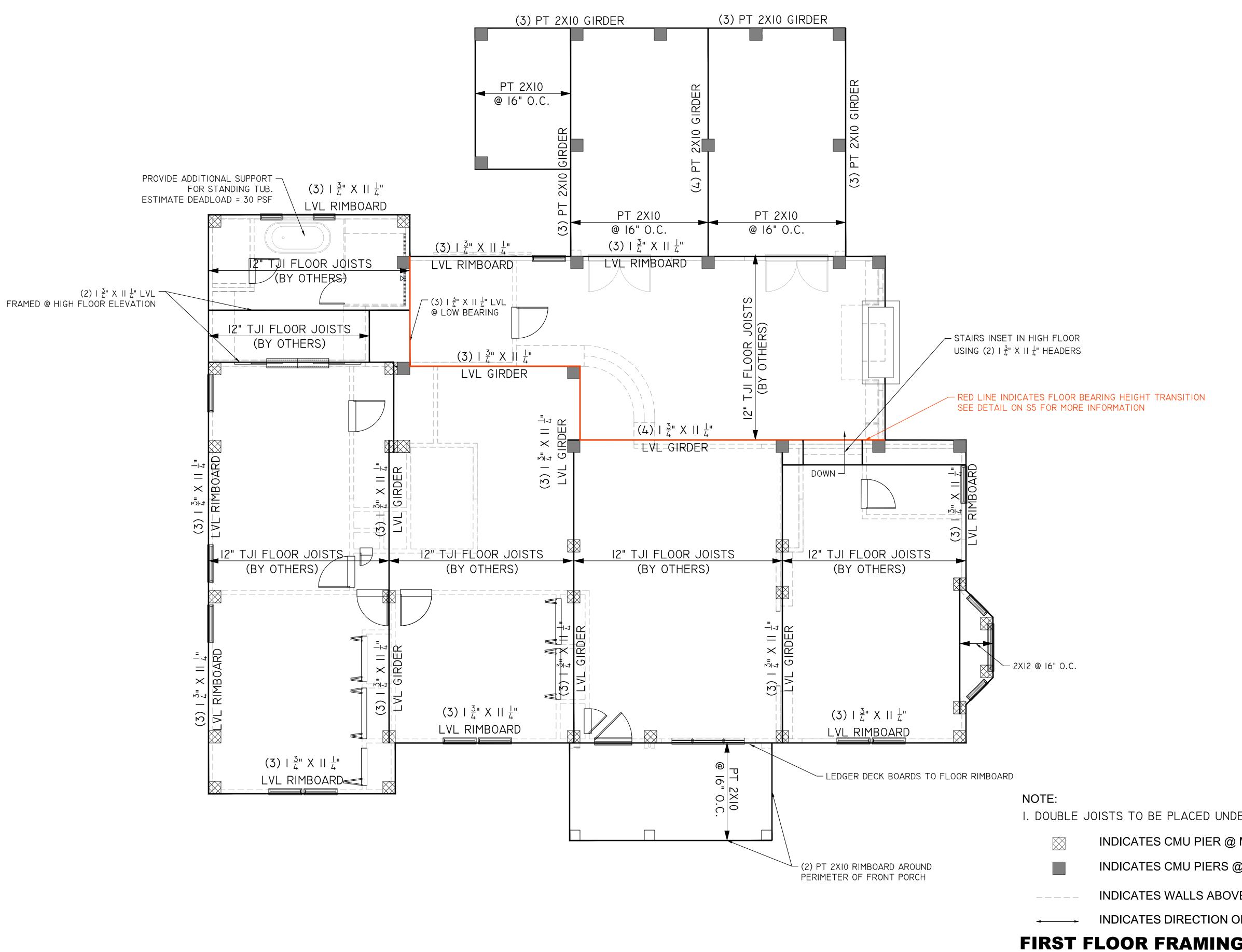
I. CONTRACTOR SHALL USE ARCHITECTURAL DRAWINGS FOR SLAB FINISH



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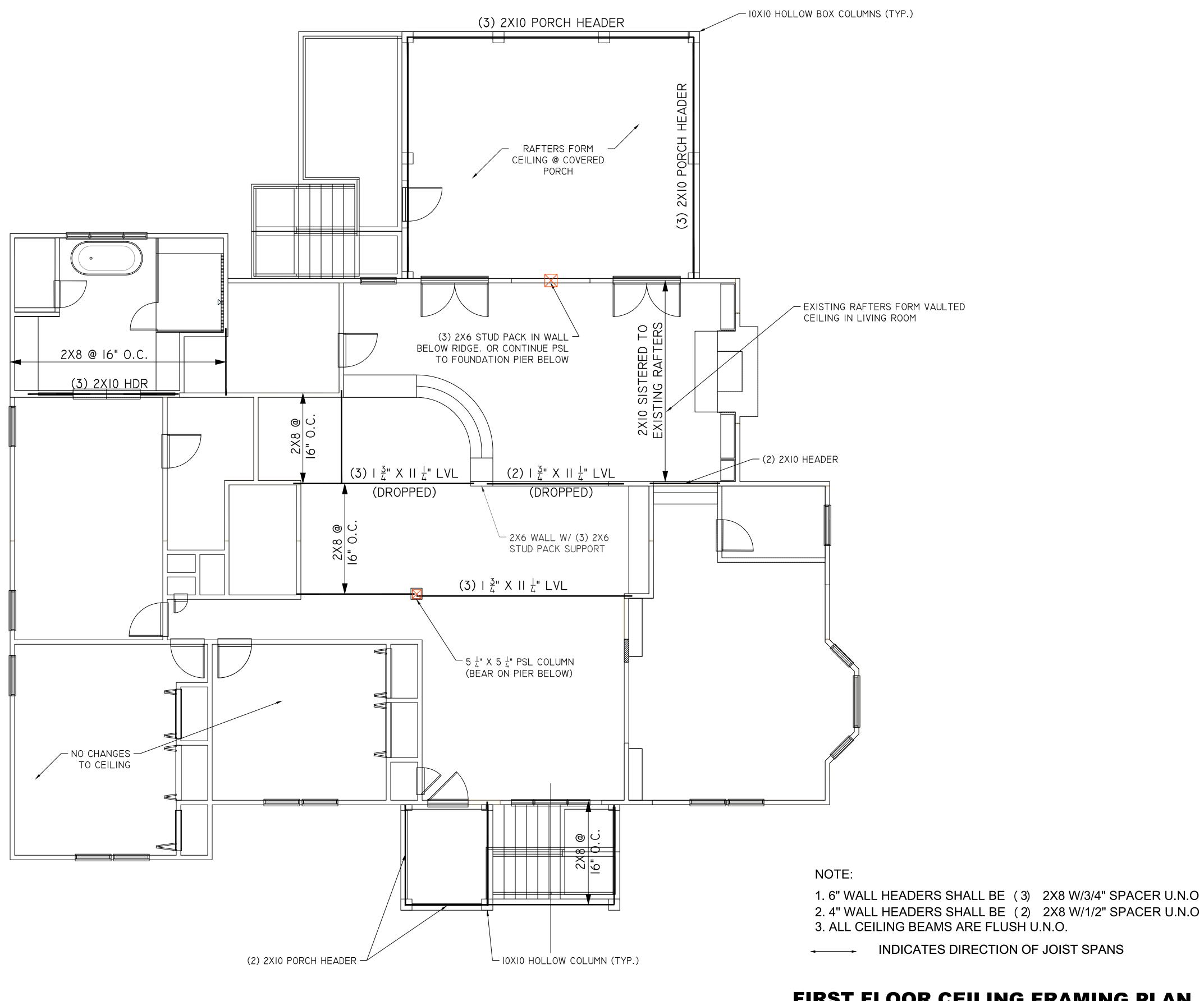
DESIGN LLC AND ARE NOT TO BE USED FOR MAKING ANY REPRODUCTION THEREOF OR FOR CONSTRUCTING ANY BUILDING

WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM THE COPY RIGHT OWNER: THREE RIVERS DESIGN LLC.

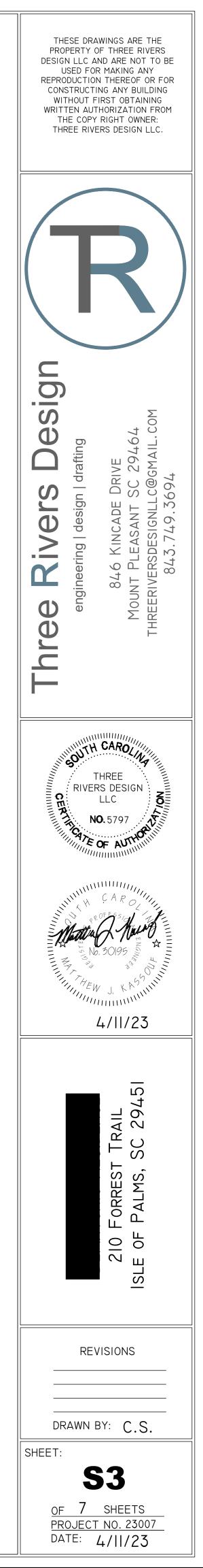


SCALE : 1/4" = 1'-0"

	THESE DRAWINGS ARE THE PROPERTY OF THREE RIVERS DESIGN LLC AND ARE NOT TO BE USED FOR MAKING ANY REPRODUCTION THEREOF OR FOR CONSTRUCTING ANY BUILDING WITHOUT FIRST OBTAINING WRITTEN AUTHORIZATION FROM THE COPY RIGHT OWNER: THREE RIVERS DESIGN LLC.
	R
ARING HEIGHT TRANSITION	Thee Rivers Design engineering design drafting engineering design drafting 846 KINCADE DRIVE 846 KINCADE DRIVE MOUNT PLEASANT SC 294.64 THREERIVERSDESIGNLLC@GMAIL.COM 84.3.74.9.3694
	THREE RIVERS DESIGN LLC NO. 5797
	$\frac{1}{4/11/23}$
DISTS TO BE PLACED UNDER PARALLEL WALLS INDICATES CMU PIER @ MAIN LEVEL FFE INDICATES CMU PIERS @ LOWER FLOOR ELEVATION	210 Forrest Trail Isle of Palms, SC 29451
INDICATES WALLS ABOVE	REVISIONS
INDICATES DIRECTION OF JOIST SPANS	
LOOR FRAMING PLAN	DRAWN BY: C.S.
	SHEET.
	OF 7 SHEETS PROJECT NO. 23007 DATE: 4/11/23



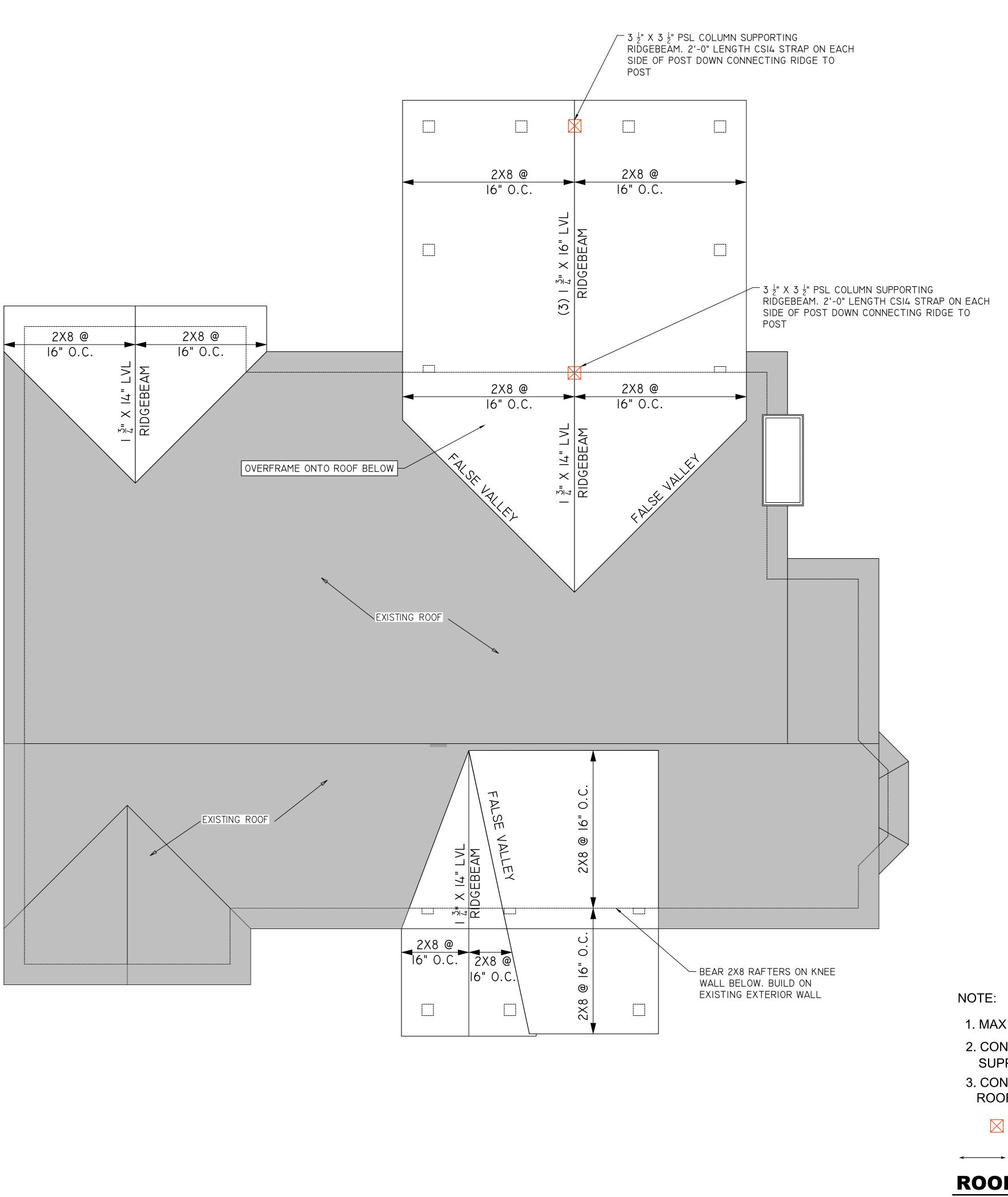
SCALE : 1/4" = 1'-0"



2. 4" WALL HEADERS SHALL BE (2) 2X8 W/1/2" SPACER U.N.O

FIRST FLOOR CEILING FRAMING PLAN

INDICATES DIRECTION OF JOIST SPANS



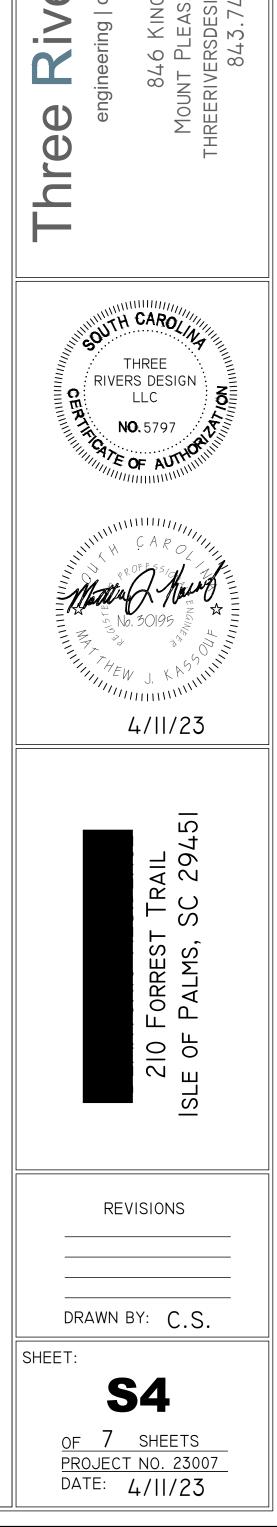
ROOF FRAMING PLAN

INDICATES DIRECTION OF RAFTER SPAN

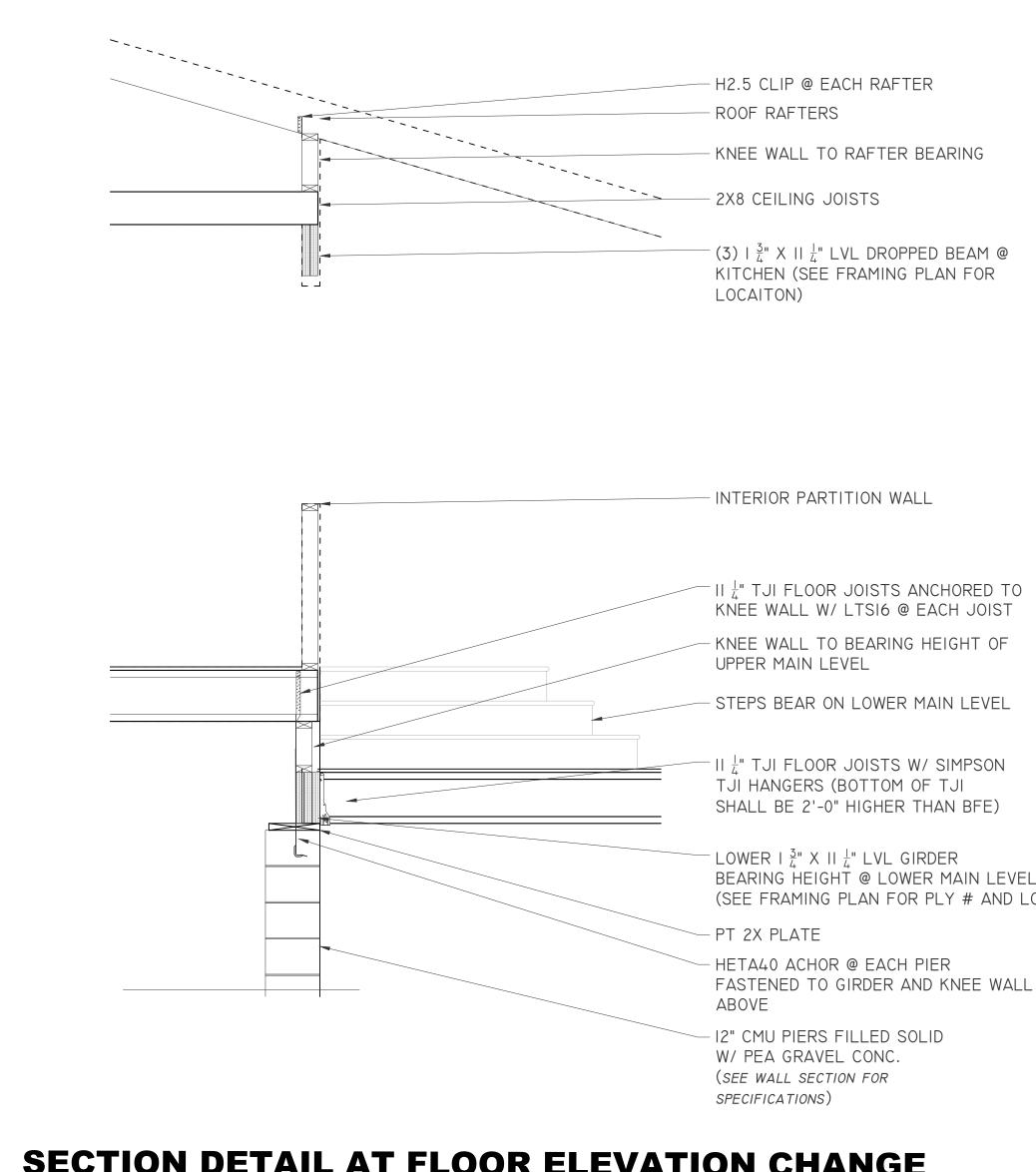
INDICATES (3) 2X6 POST DOWN U.N.O.

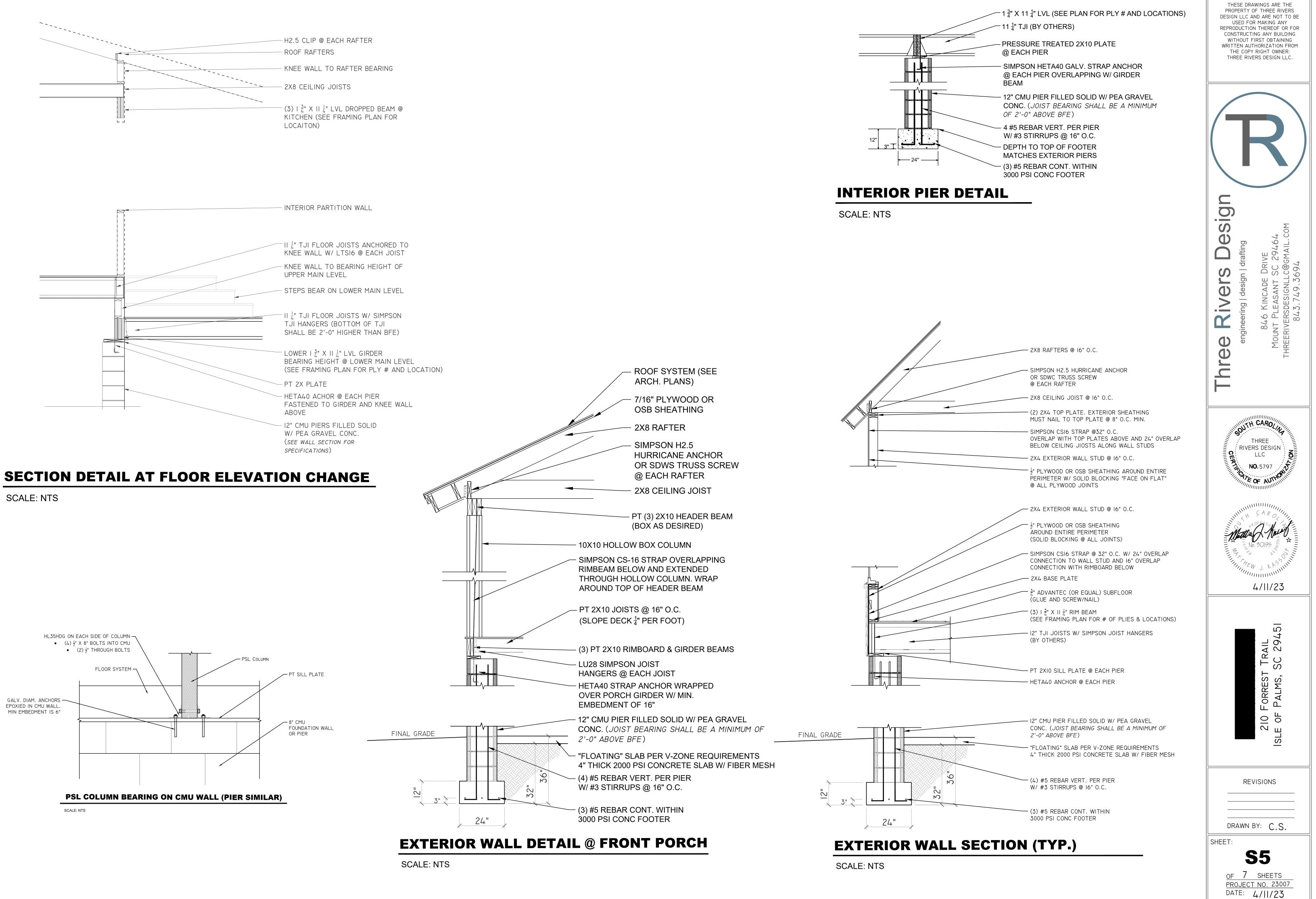
2. CONTRACTOR IS RESPONSIBLE FOR ALL TEMP SUPPORT DURING CONSTRUCTION 3. CONTRACTOR HAS THE OPTION TO USE ENGINEERED ROOF TRUSSES BY OTHERS

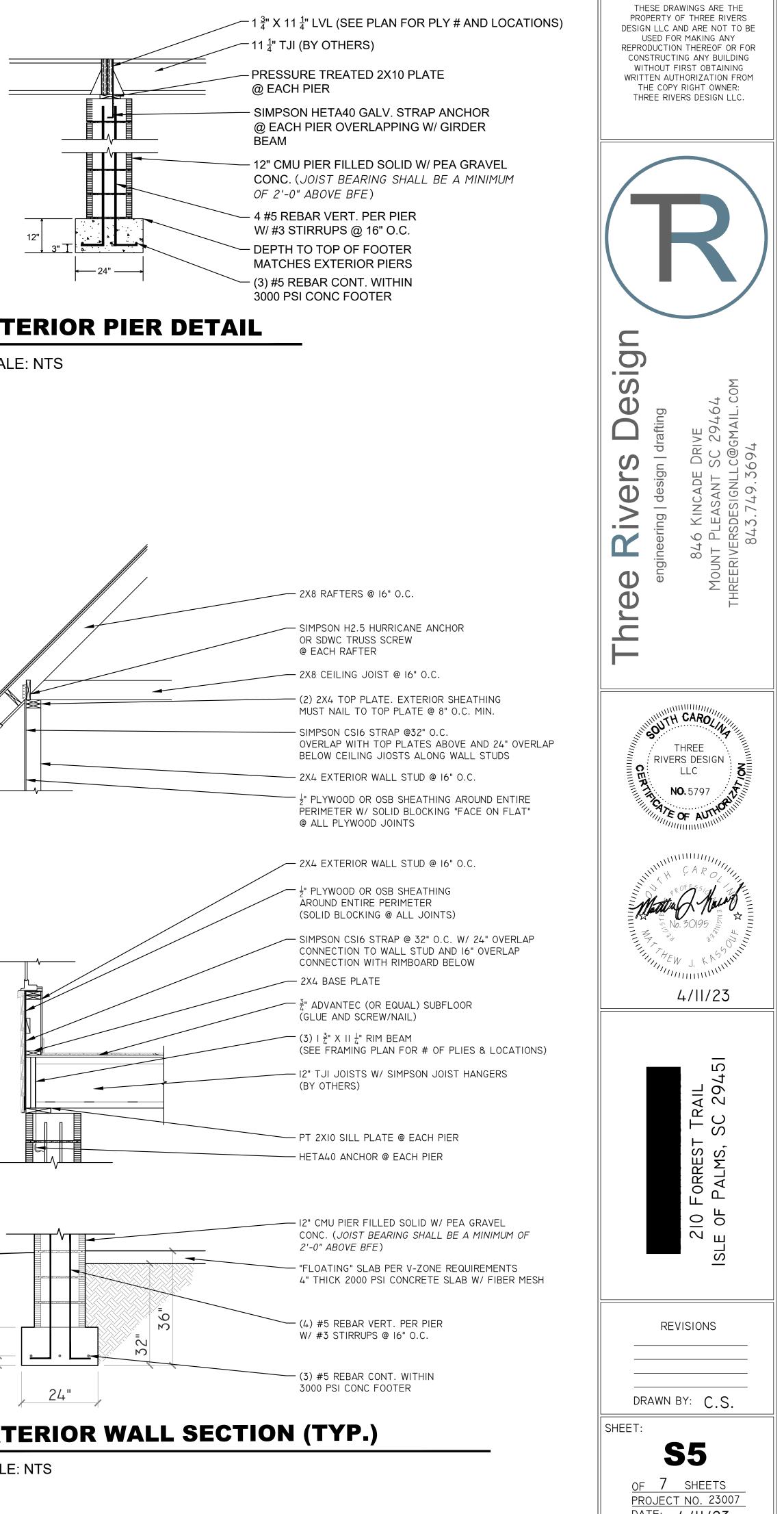
1. MAX RAFTER NOTCH = 1 3/4" FOR 2X8 & 2X10

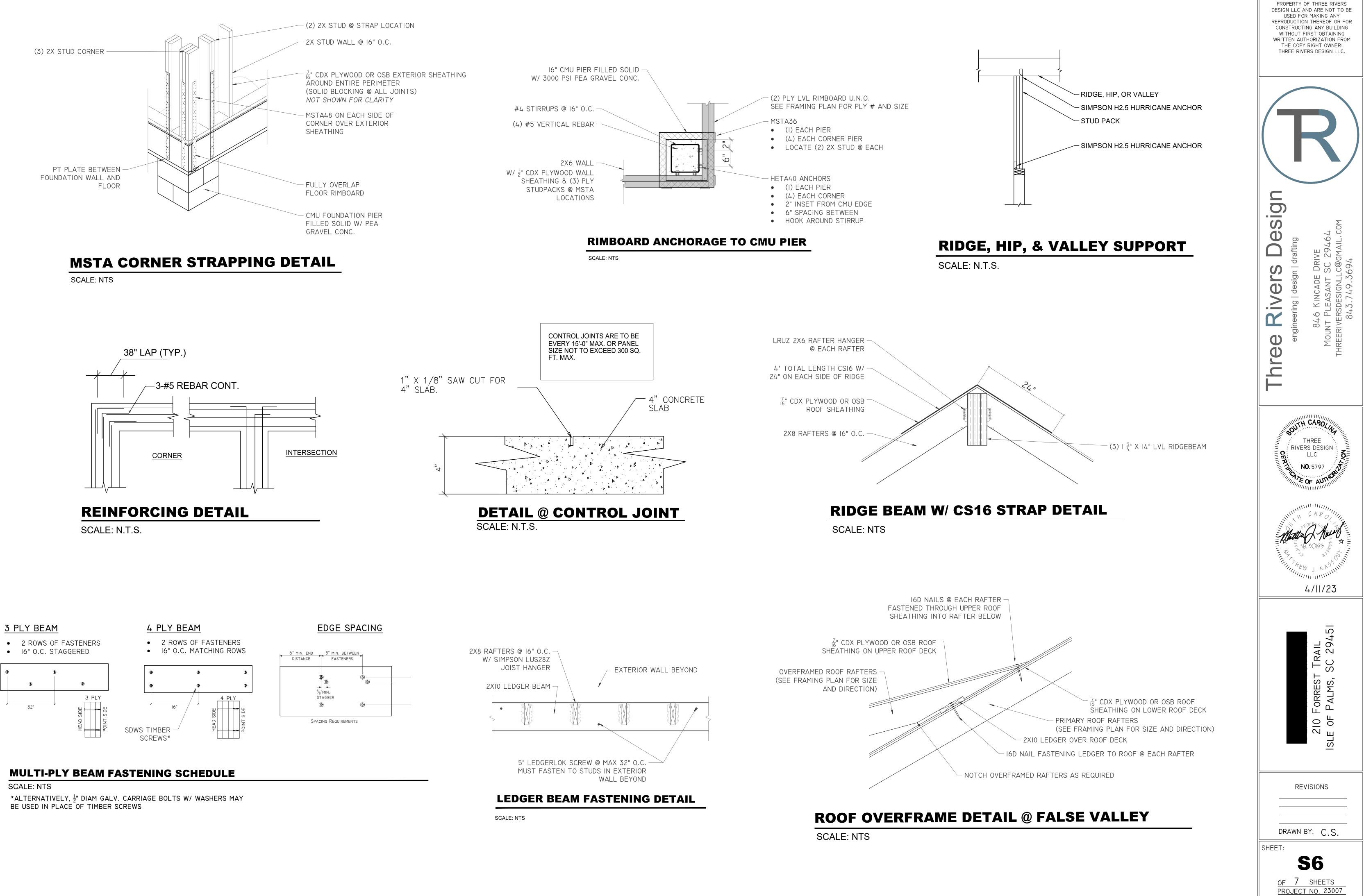












THESE DRAWINGS ARE THE

DATE: 4/11/23

GENERAL NOTES:

- FOUNDATION AND STRUCTURAL MEMBERS SHALL BE ANCHORED TO RESIST FLOATATION, COLLAPSE & LATERAL MOVEMENT DUE TO THE EFFECTS OF WIND AND WATER ASSOCIATED WITH THE BASE FLOOD ELEVATION AND IN ACCORDANCE WITH INTERNATIONAL RESIDENTIAL CODE LATEST EDITION.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF TEMPORARY BRACING AND SHORING AS REQUIRED FOR THE STABILITY OF THE STRUCTURE DURING ALL PHASES OF THE CONSTRUCTION PROCESS.
- 3. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ALL OPENINGS. REFER TO THE MECHANICAL AND ELECTRICAL PLANS FOR SIZE AND LOCATION OF ALL OPENINGS FOR DUCTS, PIPES, CONDUITS, ETC. NOT SHOWN.
- IN CASE OF CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE MORE SUBSTANTIAL REQUIREMENT SHALL BE ASSUMED TO GOVERN UNTIL A RULING IS MADE BY THE ARCHITECT AND/OR ENGINEER
- 5. IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR ALL STRUCTURAL COMPONENTS THAT REQUIRE SHOP DRAWINGS. STRUCTURAL DRAWINGS ARE NOT TO BE REPRODUCED FOR SHOP DRAWINGS, SECTION SHEETS, OR CONSTRUCTION DRAWINGS. SUBMIT ONE SET OF REPRODUCIBLE DRAWINGS AND ONE SET OF PRINTS FOR REVIEW AND APPROVAL. THE PRINTS SHALL BE CLEARLY MARKED "FOR FILE". SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR FOR ALL DIMENSIONS, ELEVATIONS, AND CONSTRUCTION PROCEDURES PRIOR TO REVIEW BY THE STRUCTURAL ENGINEER. CONTRACTOR SHALL ALLOW A MINIMUM OF 15 WORKING DAYS FOR REVIEW AND APPROVAL OF ALL SHOP DRAWINGS. PROCEEDING WITH THE WORK WITHOUT APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTORS OWN RISK.
- 6. THE CONTRACTOR SHALL BUILD THIS PROJECT IN STRICT ACCORDANCE WITH THE MOST CURRENT EDITION OF ALL APPLICABLE CODES AND STANDARDS THAT GOVERN THE WORK
- 7. CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO STARTING WORK AND SHALL NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER IMMEDIATELY OF ANY ERRORS OR INCONSISTANCIES. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY EXISTING SITE CONDITIONS THAT ARE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS.
- 8. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL DROPPED FLOOR AREAS, FLOOR DRAINS, AND ANY OTHER DETAILS NOT SHOWN ON STRUCTURAL PLANS THAT AFFECT THE WORK.
- 9. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL DRAWINGS THAT RELATE TO OTHER TRADES THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS OWN CHECK AND COORDINATION OF DIMENSIONS, CLEARANCES, ETC. WITH THE WORK OF THE OTHER TRADES. IN CASE OF CONFLICT, CONTACT THE ARCHITECT AND/OR ENGINEER.

GEOTECHNICAL:

- I. THE CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS INDICATED IN THE GEOTECHNICAL REPORT, IF SUPPLIED. ALL GEOTECHNICAL QUESTIONS ARE TO BE DIRECTED TO THE GEOTECHNICAL ENGINEER VIA THE ARCHITECT IN WRITING.
- 2. IF THIS FOUNDATION DESIGN HAS BEEN PREPARED IN THE ABSENCE OF A SOILS REPORT. A SOIL BEARING CAPACITY OF 1500 PSF IS TO BE ASSUMED. THE REASONABLENESS OF THIS ASSUMPTION SHOULD BE VERIFIED PRIOR TO COMMENCEMENT OF FOUNDATION WORK FOR THIS PROJECT.
- 3. TOP OF ALL FOOTINGS SHALL BE MINIMUM OF 12" BELOW THE FINISHED GRADE UNLESS NOTED OTHERWISE.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY AND ALL EXCAVATION SLOPES OR ANY OTHER EXCAVATION SITUATIONS.
- 5. THE EXPOSED SOIL SURFACE AFTER EXCAVATION SHALL BE COMPACTED A MINIMUM OF 98% OF THEIR STANDARD PROCTOR MAXIMUM DRY DENSITY TO COMPLY WITH ASTM D698 TO A DEPTH OF 8".

CONCRETE:

- I. ALL CONCRETE AND REINFORCING SHALL BE INSTALLED TO COMPLY WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF ACI-318.
- 2. INSTALL CONCRETE AS REQUIRED, IF REQUIRED ADDITIONAL REINFORCEMENT SHALL BE PROVIDED BY THE CONTRACTOR TO PROVIDE SUPPORT IN FOOTINGS.
- 3. CONCRETE PADS SHALL BE SIZED AND LOCATED PER THE ARCHITECTURAL DRAWINGS, AS WELL AS THE MECHANICAL AND ELECTRICAL PLANS IN ADDITION TO THE STRUCTURAL DRAWINGS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO SEE THAT ALL REBAR MEMBERS ARE PROPERLY ALIGNED AND TIED IN PLACE BEFORE PLACING ANY CONCRETE. THE REBAR IS TO REMAIN IN POSITION DURING THE CONCRETE PLACEMENT ALL REINFORCEMENT SHALL BE HELD IN PLACE DURING THE PLACEMENT OF CONCRETE
- FOR ALL BARS. PROVIDE 3" CONCRETE COVER FOR ALL REINFORCEMENT IN FOUNDATIONS
- 5. NON-SHRINK POURABLE GROUT SHALL BE USED UNDER ALL COLUMN AND BEAM BASE PLATES ONCE MATERIAL IS SET, PLUMB AND LEVEL.
- 6. ALL REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60. MINIMUM LAP SHALL COMPLY WITH ACI-318.
- 7. ALL WELDED WIRE FABRIC SHALL BE OVERLAPPED I'-0" MINIMUM, AT SIDES AND ENDS AND BE ADEQUATELY TIED. FIBERMESH MAY BE USED AS AN OPTION

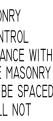
CONCRETE NOTES CONT:

- 8. ALL CONCRETE SHALL BE COMPACTED WITH HIGH FREQUENCY, INTERNAL MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND SPADING AND TAMPING AS NECESSARY.
- 9. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS WHEN THE CONCRETE IS TO BE PLACED AND CURED DURING VERY COLD OR HOT WEATHER. THE CONTRACTOR SHALL FOLLOW THE PROCEDURES ESTABLISHED BY THE ACI FOR HOT AND COLD WEATHER PLACEMENT.
- 10. SLABS ON GRADE SHALL BE REINFORCED WITH W6x6 WI.4xWI.4 WWM OR FIBERMESH ON COMPACTED SUBGRADE W/ 6 MIL POLY VAPOR BARRIER.
- II. NO WATER SHALL BE ADDED TO THE CONCRETE AT THE SITE UNLESS APPROVED BY THE ENGINEER.
- 12. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
- 13. CURING OF CONCRETE SHALL BE MADE WITH LIQUID MEMBRANE CURING COMPOUND AND BE APPLIED TO COMPLY WITH MANUFACTURERS SPECIFICATIONS.
- 14. PROVIDE CONTROL JOINTS IN SLABS SO THAT THE GROUND SLAB LENGTH TO WIDTH RATIO DOES NOT EXCEED I.5. (MAX PANEL SIZE = 300 SF)
- 15. ALL CONCRETE SHALL NOT EXCEED 4" SLUMP.
- 16. THE 28 DAY COMPRESSIVE STRENGTH FOR ALL CONCRETE SHALL BE

FOOTINGS	3000
SLABS ON GRADE STEPS ON GRADE COLUMNS PIERS	3000 F 3000 4000 4000

MASONRY

- FOR ALL BEAM BEARING LOCATIONS ON MASONRY WALLS, CONTRACTOR SHALL FILL MASONRY CELLS WITHIN 2'-0" OF BEAM BEARING WITH A MINIMUM 3,000 PSI PEA GRAVEL CONCRETE. A #5 BAR SHALL BE SUPPLIED IN EACH OF THESE CELLS AND TIED TO THE FOOTING REINFORCEMENT.
- 2. A #5 BAR SHALL BE PLACED AT EACH SIDE, TOP, AND BOTTOM OF ALL OPENINGS. ALL HORIZONTAL AND VERTICAL REINFORCING SHALL EXTEND A MINIMUM OF 30" BEYOND THE OPENING.
- 3. ALL LINTEL BEAMS SHALL BEAR A MINIMUM OF 12" ON EACH SIDE OF THE OPENINGS. ALL CELLS UNDER THE BEARING POINTS SHALL BE REINFORCED WITH A #5 BAR IN EACH CELL AND TIED TO THE FOOTING REINFORCEMENT.
- 4. CONCRETE MASONRY SHALL HAVE A MINIMUM FB OF 1,500 PSI. THIS IS ACHIEVED BY A CONCRETE BLOCK MASONRY UNIT WITH A NET AREA COMPRESSIVE STRENGTH OF 2000 PSI WHEN USED WITH TYPE M OR S MORTAR.
- 5. THE CONTRACTOR SHALL INSTALL REINFORCEMENT PLACEMENT WALL TIES TO ENSURE THAT THE REINFORCEMEN IS PROPERLY PLACED.
- 6. ALL RUNNING BOND MASONRY SHALL HAVE 9 GAUGE GALV. LADDER TYPE JOINT REINFORCEMENT @ 16" o/c VERTICALLY. AT ALL WALL CORNERS AND ALL INTERSECTIONS PREFORMED BED JOINT REINFORCEMENT SHALL BE USED.
- 7. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS WHEN MASONRY WORK IS TO BE ERECTED DURING COLD WEATHER (AMBIENT TEMPERATURE BELOW 40° F). DURING HOT WEATHER (ABOVE 90° F) PRECAUTIONS SHALL BE TAKEN TO MINIMIZE EXCESS HEAT OR COLD IN THE MASONRY UNITS, WATER, AND MORTAR. THE CONTRACTOR IS TO BE ADVISED TO FOLLOW THE RECOMMENDATIONS SET FORTH BY THE PORTLAND CEMENT ASSOCIATION FOR COLD OR HOT WEATHER APPLICATIONS.
- 8. FILL ALL CELLS BELOW FLOOR FRAMING (RETAINING WALLS) OR CONTAINING REINFORCEMENT WITH 3000 PSI PEA GRAVEL CONCRETE. PLACE CONCRETE IN LIFTS THAT ARE NO HIGHER THAN 5 FEET. ALL MASONRY UNITS SHALL BE CLEAN AND DRY PRIOR TO FILLING WITH CONCRETE. REINFORCING SHALL BE TIED @ SPLICED AS NECESSARY.
- 9. ALL MASONRY SHALL BE PLACED IN FULL MORTAR BED. TYPE M OR S MORTAR SHALL BE USED.
- 10. MASONRY WALLS AT ALL INTERSECTIONS SHALL BE TIED WITH A I I/4" X I/4" X 30" LONG STRAP WITH A 3" 90° BEND AT EACH END. STEEL STRAPS SHALL BE INSTALLED IN THE MORTAR BED AT 48" ON CENTER VERTICALLY.
- II. TYPICAL MASONRY REINFORCEMENT SPLICES SHALL BE AS FOLLOWS: #4 BARS - 30" LAP #5 BARS - 38" LAP
- 12. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS AND BRICK EXPANSION JOINTS. ALL CONTROL AND EXPANSION JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THE NATIONAL CONCRETE MASONRY ASSOCIATION. IN NO CASE SHALL EXTERIOR WALL JOINTS BE SPACED GREATER THAN 25 FEET AND INTERIOR WALL JOINTS SHALL NOT EXCEED 30 FEET ON CENTER.
- 13. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS FOR REINFORCEMENT SHOWING THE NUMBER, SIZE, AND LOCATION, INCLUDING BAR LISTS AND DIAGRAMS FOR THE COMPLETION OF THE WORK.
- 14. ALL MASONRY OPENINGS SHALL BE PROVIDED WITH A "CASTCRETE" OR "POWERS STEEL" LINTEL BEAM WITH (2) #5 REBAR. PROVIDE TEMP. SUPPORT AT 4'-6" MAX. O.C. FOR 2 DAYS AFTER CONC. FILL



STRUCTURAL & MISC. STEEL

- ALL FRAMING AND MISCELLANEOUS STEEL SHALL BE WELDED WITH A FILLET ALL AROUND UNLESS NOTED OTHERWISE. WELD SIZE SHALL BE THE MAXIMUM ALLOWED BY THE LATEST EDITION OF THE "MANUAL
- OF STEEL CONSTRUCTION" BASED ON THE THICKNESS OF THE MATERIAL SHOP AND FIELD CONNECTIONS NOT DETAILED ON THE DRAWINGS MAY BE WELDED OR BOLTED. CUTS, HOLES, COPING, ETC., REQUIRED FOR THE WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND BE FABRICATED IN THE SHOP. FIELD CUTTING AND/OR BURNING IS NOT PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.
- THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE WEB REINFORCEMENT AT ALL OPENINGS IN STEEL MEMBERS INCLUDING BEAMS, JOISTS, AND GIRDERS.
- 4. ALL STRUCTURAL STEEL BEAMS SHALL HAVE A YIELD STRESS OF 50 KSI. PLATES, ANGLES, AND MISC. STEEL SHALL COMPL' WITH THE LATEST EDITION OF ASTM A-36. UNLESS OTHERWISE NOTED, STEEL PIPES SHALL COMPLY TO ASTM A-50I. STEEL TUBES SHALL CONFORM TO ASTM A-500.
- 5. STRUCTURAL STEEL CONTRACTOR SHALL COORDINATE THE BOTTOM OF BASE PLATE ELEVATION WITH THE TOP OF BEAM ELEVATION AS NOTED ON THE DRAWINGS. IN CASE OF A CONFLICT, THE CONTRACTOF SHALL MAKE ALLOWANCE IN HIS BID AND ADDRESS IT TO THE ENGINEER IN WRITTING
- 6. ALL HARDWARE AND TIE DOWN STRAPS EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED.
- 7. ALL BEAM CONNECTIONS SHALL BE 3/4" DIAMETER BOLTED SLIP CRITICAL TYPE CONNECTIONS A-325 BOLTS UNLESS NOTED OTHERWISE. ALL BEAM AND GIRDER CONNECTIONS UNLESS SHOWN OTHERWISE SHALL BE AT LEAST CAPABLE OF DEVELOPING THE UNIFORMLY DISTRIBUTED LOADING CAPACITY OF MEMBER FOR ITS SPAN AS PER THE AISC MANUAL OF STEEL CONSTRUCTION (LATEST EDITION). ALL OTHER CONNECTIONS THAT ARE NOT INDICATED SHALL BE BOLTED (3/4" DIAMETER) CONNECTIONS
- USING AN A-325 SLIP CRITICAL TYPE BOLTS UNLESS OTHERWISE NOTED 8. ALL SHOP AND FIELD WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS TO COMPLY WITH A.W.S. SPECIFICATIONS (LATEST EDITION). BOTH SHOP AND FIELD WELDER CERTIFICATIONS SHALL BE CURRENT UNTIL THE COMPLETION OF THE STEEL WORK AND MADE AVAILABLE UPON REQUEST OF THE ARCHITECT/ENGINEER. THE ARCHITECT/ ENGINEER RESERVES THE RIGHT TO DELAY SHOP DRAWING APPROVAL IN THE ABSENCE OF THE REQUESTED CERTIFICATES.
- 9. ANCHOR BOLTS SHALL COMPLY WITH ASTM A-307
- 10. FIELD SPLICES SHALL BE DESIGNED AND CONSTRUCTED TO DEVELOF THE FULL CAPACITY OF THE MEMBER IN BENDING, SHEAR, AND AXIAL LOADING TO COMPLY WITH THE AISC SPECIFICATIONS.
- II. WEB STIFFENER PLATES ARE TO BE SUPPLIED BY THE CONTRACTOR AT THE END OF STEEL BEAM CANTILEVERS AND IN THE BENDS OF ALL CRIPPLED BEAMS (DIAGONALLY). THE STIFFENER PLATE THICKNESS SHALL EQUAL OR EXCEED THE FLANGE THICKNESS OF THE BEAM
- 12. USE TWO SIDED WEB ANGLE CONNECTIONS FOR ALL BEAM CONNECTIONS PER AISC SPECIFICATIONS (LATEST EDITION) UNLESS OTHERWISE NOTED OR DETAILED.
- 13. E-70 ELECTRODES TO BE USED FOR ALL WELDING APPLICATIONS. 14. ALL STEEL DETAILS AND CONNECTIONS SHALL COMPLY WITH THE LATEST EDITION OF THE AISC SPECIFICATIONS
- 15. THE CONTRACTOR SHALL SUBMIT DETAILED STRUCTURAL STEEL SHOP DRAWINGS TO INCLUDE COLUMNS, BEAMS, JOISTS, BRIDGING, DECKING, AND ANY CONNECTIONS. THESE SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE STATE OF THE PROJECT. STEEL FABRICATOR SHALL SUPPLY EMBEDDED STEEL PLATE AND BRACKET LOCATION DRAWINGS. THE STRUCTURAL DRAWINGS ARE NOT TO BE REPRODUCED FOR SHOP DRAWINGS, SECTION SHEETS, OR ERECTION PLANS. SUBMIT ONE SET OF REPRODUCIBLE DRAWINGS AND ONE SET OF PRINTS FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR FOR ALL DIMENSIONS, ELEVATIONS, AND ERECTION PROCEDURE PRIOR TO SUBMITTAL TO ENGINEER FOR REVIEW. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 15 WORKING DAYS FOR REVIEW AND APPROVAL OF ALL SHOP DRAWINGS. THE CONTRACTOR PROCEEDING WITHOUT
- APPROVED SHOP DRAWINGS IS DOING SO AT HIS OWN RISK. 16. ALL STEEL BEAMS AND JOIST GIRDERS SHALL BEAR
- FULLY ON STEEL BEARING PLATES (TYPICALLY).
- 17. A CONTINUOUS 3/8" PLATE SHALL BE SHOP WELDED TO THE BOTTOM FLANGE OF ALL BEAMS SUPPORTING MASONRY UNLESS NOTED OTHERWISE.
- 18. THE ENGINEER SHALL VERIFY THAT JOIST AND BEAM BEARING ELEVATIONS ENSURE PROPER ROOF SLOPES TO ALLOW FOR DRAINAGE AND CORRECT FLOOR ELEVATIONS. SEE ARCHITECTURAL DRAWINGS FOR FLASHING, ROOFING, AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL PLANS.
- 19. FOR ALL STEEL BEAM LOCATIONS, INSTALL STIFFENER PLATES ON EACH SIDE OF THE WEB AT SUPPORTS AND LOCATIONS OF POINT LOADS FROM BEAMS AND COLUMNS.
- 20. A NON SHRINK GROUT SHALL BE PLACED UNDER ALL COLUMN BASE PLATES AFTER THE STEEL IS SET, PLUMBED, AND LEVELED
- 21. ALL WELDS THAT ARE APPLIED TO ANY EXPOSED STEEL MEMBERS
- SHALL BE FIELD COATED WITH A ZINC RICH PAINT. 22. ALL STEEL BEAMS AND STEEL COLUMNS SHALL BEAR ON STEEL PLATES (MIN. SIZE 7" X 12" X 1/2"), UNDER NO CONDITION SHALL ANY STEEL BEAR ON WOOD. STEEL FABRICATOR SHALL PROVIDE
- SHOP DRAWINGS FOR STEEL PLATES AS NEEDED. SHOP DRAWINGS TO BE APPROVED BY THE ARCHITECT/ENGINEER. 23. ALL STRUCTURAL STEEL SHALL BE DELIVERED WITH ONE COAT OF PRIMER & SHALL BE FIELD PAINTED W/2 COATS OF
- PAINT. TOUCH UP AFTER ERECTION. 24. COLD-FORMED METAL STUDS SHALL CONFORM TO ASTM A653 FY = 33.0 KSI) AND SHALL BE CLARK PCS SERIES I - 5/8" FLANGES & I/2" LIPS) SIZED AS INDICATED OR

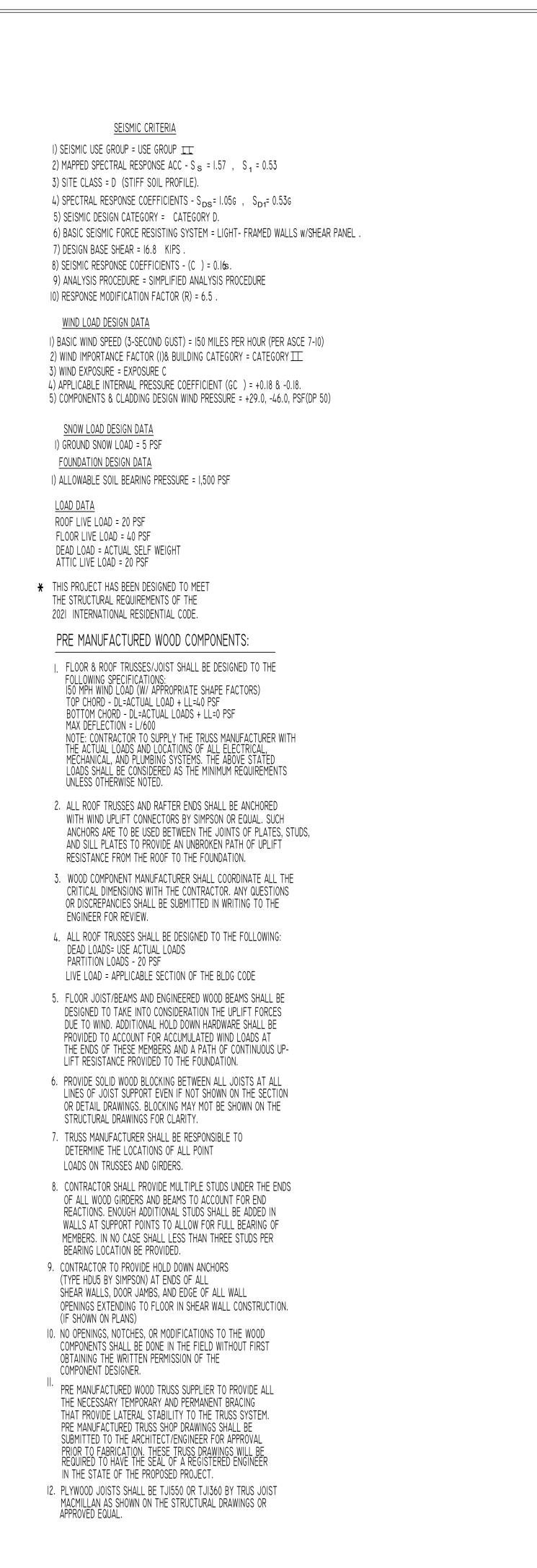
APPROVED EQUAL.

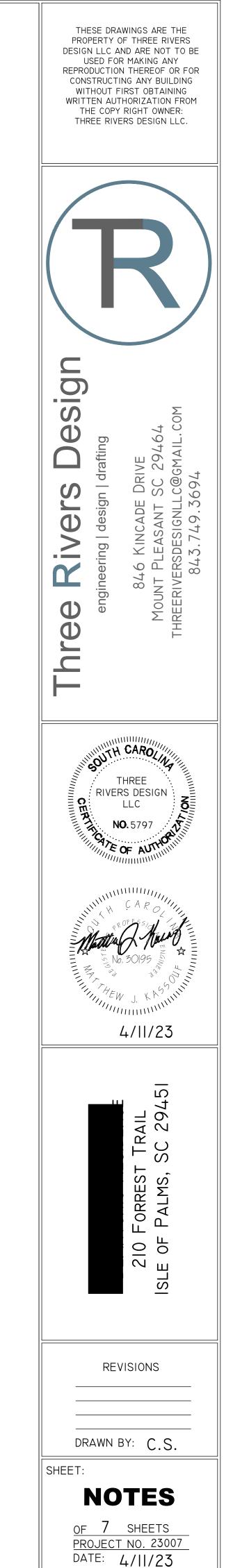
WOOD / LUMBER:

- ALL LUMBER SHALL BE CONTINUOUS WITHOUT SPLICES EXCEPT
- AS NOTED ON THE STRUCTURAL PLANS OR DETAILS. 2. ALL WOOD FRAMING SHALL BE SOUTHERN YELLOW PINE # 2 UNLESS NOTED OTHERWISE. ALL STUDS SHALL BE LABELED "SPF STUDS"
- ALL TREATED WOOD SHALL COMPLY WITH THE LATEST EDITION OF CODES. FOR LOCATIONS OF TREATED WOOD SEE THE ARCHITECTURAL DRAWINGS & STRUCTURAL DRAWINGS
- WHERE CEILING JOISTS ARE NOT PARALLEL TO ROOF RAFTERS, SUBFLOORING OR METAL STRAPS ATTACHED TO THE ENDS OF THE RAFTERS SHALL BE INSTALLED TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING THEREBY PREVENTING THE ROOF RAFTERS TO SPREAD APART. WHERE THE CEILING JOISTS ARE NOT PROVIDED AT THE TOP OF THE RAFTER SUPPORT WALLS, THE RIDGE FORMED B THESE RAFTERS SHALL BE SUPPORTED BY DESIGNED RIDGE BEAM. SEE STRUCTURAL DRAWINGS.
- SOLID BLOCKING TO BE PROVIDED BETWEEN ALL FLOOR JOISTS AT MID-SPAN AND ALL LINES OF JOIST SUPPORT EVEN IF NOT SHOWN ON THE SECTION OR DETAIL DRAWINGS. BLOCKING MAY NOT BE SHOWN ON THE STRUCTURAL SECTIONS OR DETAILS FOR CLARITY.
- 6. ALL NAILING SHALL COMPLY WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE BUILDING CODES.
- WOOD MEMBERS SHALL NOT BE LESS THAN 6" FROM FINISHED GRADE EXCEPT WHERE SIDING, SHEATHING, AND WALL FRAMING ARE OF AN APPROVED PRESSURE TREATED OR NATURALLY DURABLE WOOD PRODUCT.
- EXTERIOR WALLS AND SHEAR WALLS TO BE SHEATHED W/ 1/2" EXTERIOR GRADE PLYWOOD WITH BLOCKING AT ALL JOINTS. PLYWOOD IS TO BE NAILED TO ALL STUDS, TOP PLATES, SIL PLATES, BANDS, AND BLOCKING. THE CONTRACTOR SHALL ATTACH WALL SHEATHING W/ 8D NAILS @ 4" O/C ALONG SHEATHING EDGES AND 8" O.C. AT INTERMEDIATE STUDS, UNLESS THERE IS ANOTHER LAMINATED VENEER LUMBER (LVL) OR GLULAMS IF CALLED FOR SHALL BI EQUAL TO NAILING PATTERN INDICATED ON THE DRAWINGS. ALL NAILS SHALL BE HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE.
- 9. PLYWOOD FLOORING SHALL BE 3/4" TONGUE AND GROOVE EXT GRADE STURD-I-FLOOR. ALL FLOOR DECKING SHALL BE GLUED AND SCREW NAILED AT ALL SUPPORTS WITH A NAILING PATTERN OF 8D NAILS @ 6" O/C ALONG EDGES AND 12" O/C ALONG ALL INTERMEDIATE SUPPORTS/JOISTS UNLESS OTHERWISE NOTED
- 10. EXTERIOR WALLS @ SECOND FLOOR SHALL BE TIED TO GIRDERS WITH SIMPSON LSTA30 (OR EQUAL) STRAP TIES . AT 6'-0" O/C AND TIED W/ I/2" CDX PLYWOOD FROM TOP PLATE TO CMU WALL TIMBER PLATE. EXTERIOR GIRDERS BETWEEN FLOORS SHALL ALSO BE TIED W/ SIMPSON LSTA30 (OR EQUAL) STRAP TIES AT MAX. 6'-0" o/c..
- II. GLULAM BEAMS SHALL BE "PARALLAM" WITH 2900 PSI BENDING STRESS, 2,000,000 PSI MODULUS OF ELASTICITY BY TRUS JOIST MACMILLAN.
- 12. NON-TREATED WOOD MEMBERS SUPPORTED ON MASONRY SHALL BEAR ON TREATED TIMBER PLATES.
- 13. FLOOR JOISTS AT DROPPED BEAMS SHALL BE FASTENED TO SUPPORTS WITH HURRICANE ANCHORS (SIMPSON TSI2 OR EQUAL).
- 14. ALL PLYWOOD SHEATHING SHALL HAVE 1/8" SPACE BETWEEN SHEETS. (EXCEPT FOR AREAS THAT CALL FOR T&G PLYWOOD)
- 15. ALL ROOF RAFTER ENDS SHALL BE ANCHORED WITH WIND UPLIFT ANCHOR BY SIMPSON OR EQUAL. SUCH ANCHORS SHALL BE USED AT JOINTS BETWEEN PLATES, STUDS, AND SILL PLATES TO PROVIDE A PATH OF UNBROKEN UPLIFT RESISTANCE FROM THE ROOF TO THE FOUNDATION.
- 16. ROOF FRAMING SHALL BE SHEATHED W/ 7/16" CDX PLYWOOD OR 7/16" ADVANTEC AND FASTENED W/ IOD NAILS AT 4" O.C. ALONG ALL EDGES AND 8" O.C. ALONG INTERMEDIATE MEMBERS. ALL EDGES TO BE NAILED AROUND PERIMETER EDGES OF THE ROOF'S IST SHEET OF PLYWOOD. (PROVIDE BLOCKING AS NECESSARY).
- 17. LOAD BEARING WALLS AND/OR SHEAR WALLS LOCATED PERPENDICULAR TO FLOOR JOISTS SHALL HAVE SOLID BLOCKING SECURELY PLACED BETWEEN THE FLOOR MEMBERS. THIS SOLID WOOD BLOCKING SHALL BE FOR THE FULL DEPTH OF THE FLOOR MEMBERS AND BE LOCATED DIRECTLY UNDER THE WALL FOR THE FULL BEARING WIDTH AND LENGTH OF THE WALL CONSTRUCTION.
- 18. TIMBERS PILES SHALL HAVE A MIMIMUM TIP DIAMETER OF 8" & SHALL BE PRESSURE TREATED. PILES SHALL CONFORM TO ASTM A251 LENGTHS SHALL BE AS INDICATED ON THE DRAWINGS.
- 19. GALVANIZED HURRICANE ANCHORS(SIMPSON TYPE (1) H8 OR (1) H10) SHALL BE USED FOR ALL RAFTER ANCHORAGES AT INTERSECTIONS WITH ALL WALLS OR BEAMS, STAINLESS STEEL(SS) HURRICANE ANCHORS SHALL BE USED IN AREAS EXPOSED TO THE ATMOSPHERE, FASTENED WITH (SS) RING SHANK NAILS.
- FLOOR JOIST / TRUSSES UNDER PARALLEL WALLS SHALL BE DOUBLED UNLESS A BEAM IS SHOWN ON THE FRAMING PLANS.
- 21. PROVIDE 1/2" PLYWOOD OR OSB PANELS FOR ALL EXTERIOR DOORS & WINDOWS. PRE CUT PANELS SHALL BE FASTENED TO EXT. WALL I. A. W. TABLE R30I.2.I.2 ON PAGE 43 OF 2018 I. R. C. IF IMPACT WINDOWS ARE NOT PROVIDED.
- 22. IF "QUICK-TIE" ANCHOR OR "GO-BOLT" SYSTEM IS USED, STRAP ANCHORS ON OUTSIDE OF EXTERIOR WALLS ARE NOT REQUIRED.

DESIGN CRITERIA

WEATHERING FOR CONCRETE - MODERATE TERMITE INFEST. PROB. - VERY HEAVY DECAY PROB. - MODERATE TO SEVERE WINTER DESIGN TEMP. - 27 DEGREES FROST LINE DEPTH - 12 INCHES ,





STORM WATER DRAINAGE PLAN

210 Forest Trail

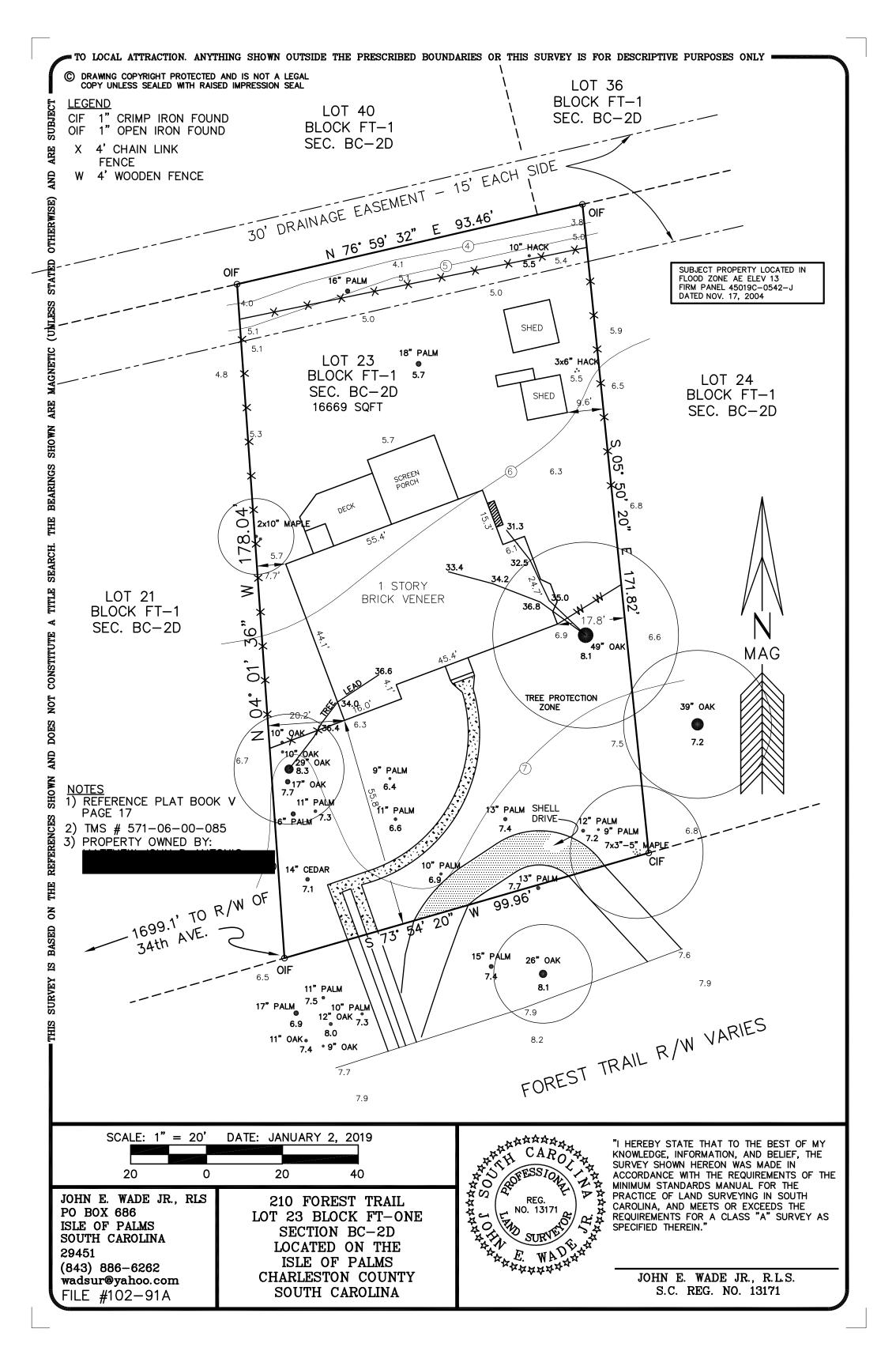
Isle of Palms SC 29451

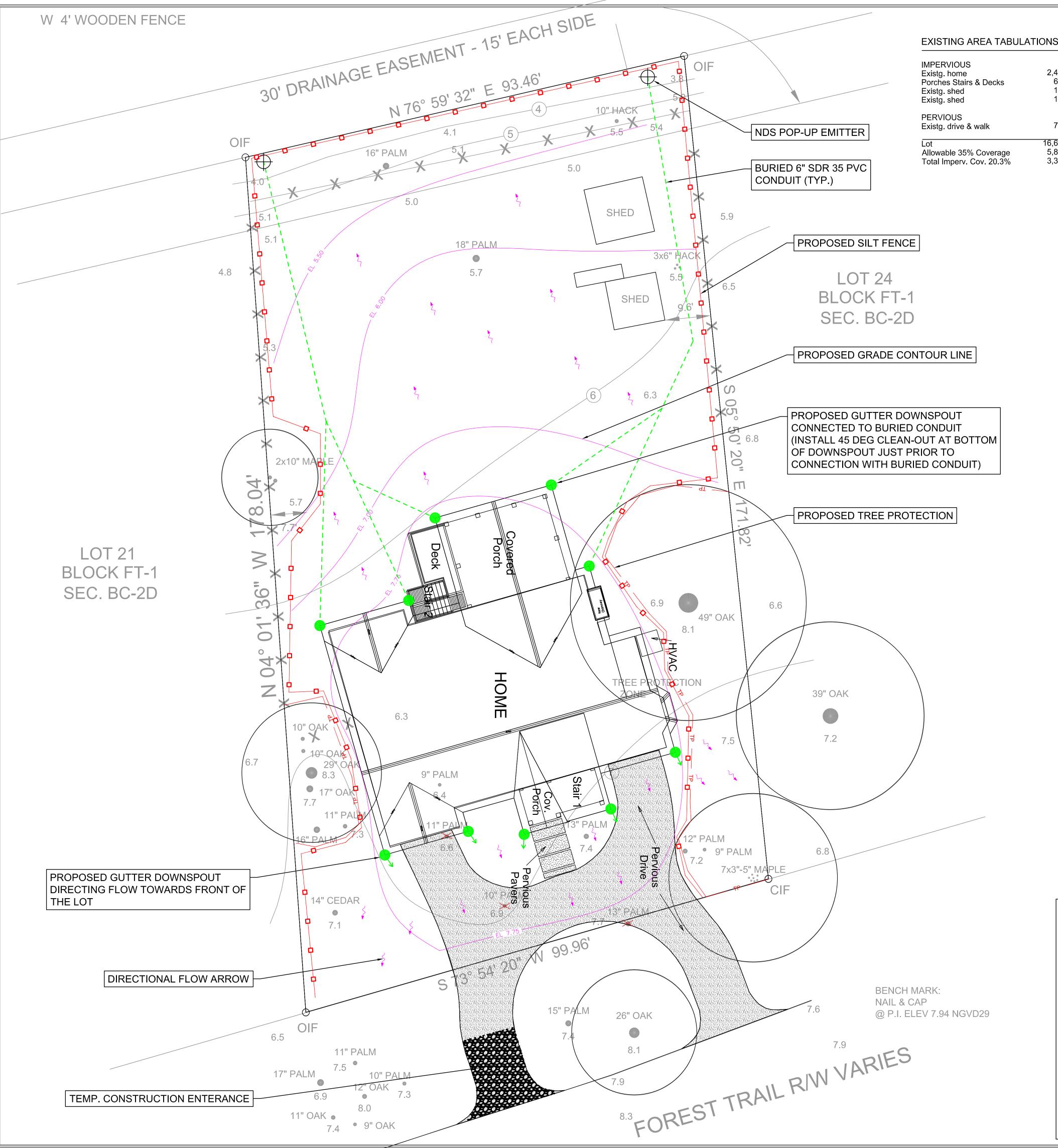


Three Rivers Design PO Box 2029 Mount Pleasant 29465 matthew.kassouf@threeriversdesignllc.com m. 8437493694











NEW AREA TABULATIONS

Existg. home
Porches Stairs & Decks
Existg. shed
Existg. shed
HVAČ

2,456 SF

676 SF

143 SF

108 SF

726 SF

16,669 SF

5,834 SF

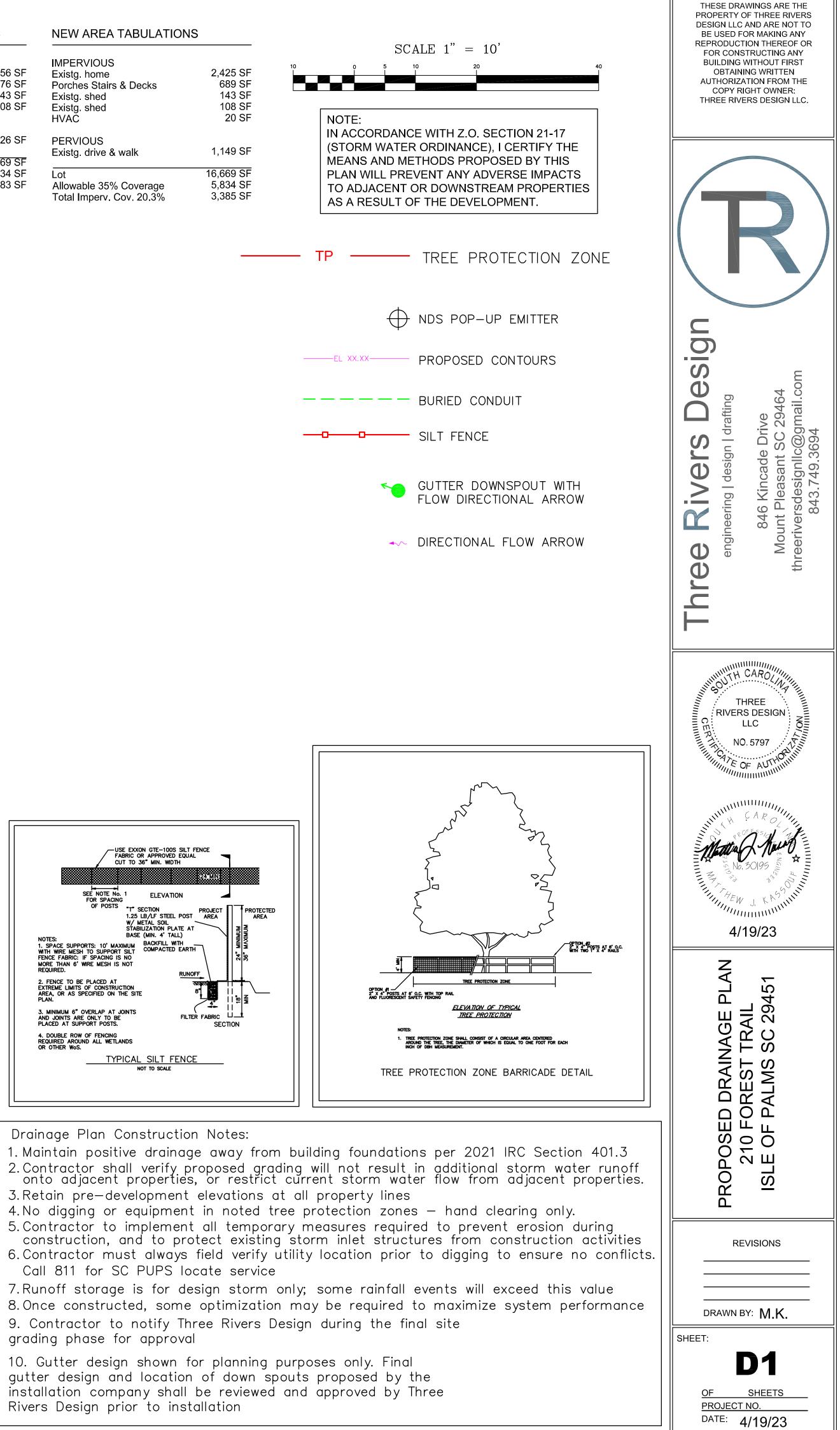
3,383 SF

PERVIOUS Existg. drive & walk

Lot Allowable 35% Coverage Total Imperv. Cov. 20.3%

SEE NOTE No. 1 FOR SPACING OF POSTS ELEVATION BASE (MIN. 4' TALL) NOTES: 1. SPACE SUPPORTS: 10' MAXIMUM WITH WIRE MESH TO SUPPORT SILT FENCE FABRIC: IF SPACING IS NO MORE THAN 6' WIRE MESH IS NOT REQUIRED. 2. FENCE TO BE PLACED AT EXTREME LIMITS OF CONSTRUCTION AREA, OR AS SPECIFIED ON THE SITE 3. MINIMUM 6" OVERLAP AT JOINTS AND JOINTS ARE ONLY TO BE PLACED AT SUPPORT POSTS. 4. DOUBLE ROW OF FENCING REQUIRED AROUND ALL WETLANDS OR OTHER WoS. TYPICAL SILT FENCE NOT TO SCALE Drainage Plan Construction Notes: Call 811 for SC PUPS locate service grading phase for approval

Rivers Design prior to installation



Gerald J Benoit, ISA





"Preserving Lowcountry Live Oaks" Gerald Benoit 3300 Cedar Creek Court ~ Mt Pleasant ~ SC ~ 29466 ~ (843) 224-1629 Seajunkie49@gmail.com

May 17, 2023



RE: Tree Preservation Plan for 210 Forest Trail, Isle of Palms, SC

- Building a sufficient tree protection zone barrier on protected trees See attached guide.
- Preparation of the root system through the use of a ground saw N/A
- Preparation of the soil in the tree protection zone (fertilization) with an organic fertilizer in the amounts compliant with the ANSI A300 Fertilization Code See Addendum A
- Protection of the ground from compaction with mulch N/A
- Pruning to accommodate new structures in compliance with the ANSI-A-300 pruning code
- Removal of vines by cutting roots at the base, not pulling them from the tree N/A
- The site will be visited by an arborist throughout the construction period to ensure that the Tree Preservation Plan requirements are met. Any violations will be reported to the General Contractor and the City of Isle of Palms.

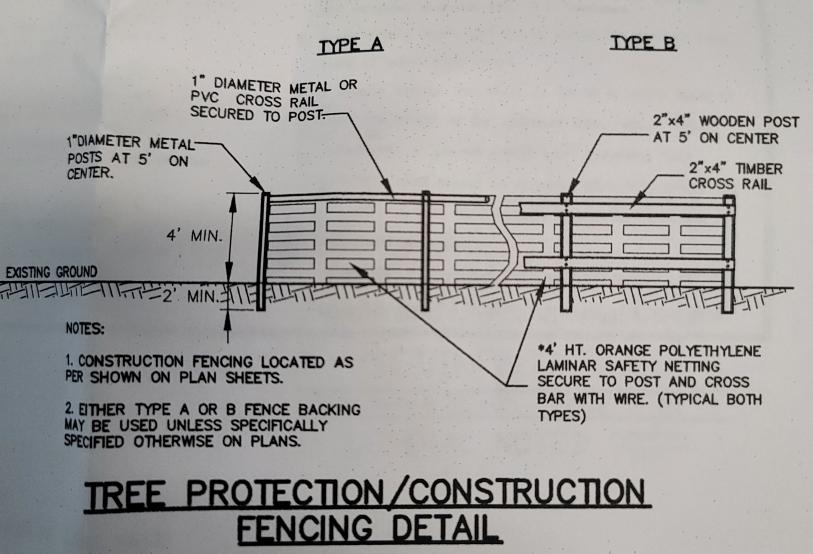
Addendum A: Amend soil with 16-8-6 50% organic slow-release nitrogen at the rate of 2.5 lbs to 3.5 lbs per 1,000 square feet to improve and maintain vigor on the protected Oaks located on the property.

Please contact me at 843-224-1629 if you have any questions or concerns.

Respectfully,

Gerald Benoit, ISA

Andrew Hargett, ISA SO-6569A



NTS

- 2' ASPHALT SURFACE COURSE