STRUCTURAL SCOPE OF WORK

. THE STRUCTURAL SCOPE OF WORK IS INTENDED TO ADDRESS THE FOUNDATION AND FRAMING FOR A NEW RESIDENCE.

- GENERAL NOTES ALL WORK SHALL CONFORM TO THE LATEST FLORIDA BUILDING CODE AND ALL OTHER APPLICABLE CODES AND ORDINANCES. OBTAIN ALL REQUIRED PERMITS FOR THE PROPER LEGAL EXECUTION OF THE WORK DESCRIBED IN THESE
- DRAWINGS AND SPECIFICATIONS 2. PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES OR RAFTERS TO FOUNDATION FOR ALL NEW CONSTRUCTION. IF ANY DISCREPANCIES, CALL ENGINEER FOR CLARIFICATION BEFORE PROCEEDING. 3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING ANY WORK. HE/SHE SHALL NOTIFY THE
- DESIGNER OF ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND ACTUAL SITE CONDITIONS FOUND DURING OR PRIOR TO DEMOLITION. FOUNDATION DESIGN IS BASED ON 1,500 PSF STABLE SOIL CONDITIONS. PROVIDE TESTING ON SOIL COMPACTION PRIOR TO LAYING STEEL OR POURING CONCRETE, COMPACTION SHOULD
- ACHIEVE 95% MODIFIED PROCTOR DENSITY. PROVIDE ADEQUATE BLOCKING BEHIND ALL WALL MOUNTED FIXTURES PROVIDE ALL ACCESSORIES, HARDWARE AND MISC. ITEMS AS PER DRAWINGS AND SPECIFICATIONS. ALL ITEMS SHALL BE INSTALLED AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND CUT SHEETS. CONTRACTOR MUST VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS.
- ALL CONCRETE SHALL BE 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS THE ENGINEER SHALL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, NOR WILL HE, BE RESPONSIBLE FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, OR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR OR HAVE
- CONTROL OR CHARGE OVER THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTORS, OR ANY OF THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.

CODES AND DESIGN CRITERIA

- THE DESIGN IS BASED ON, AND ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE (FBC) WITH AMENDMENTS AND DESIGN CODES REFERENCED WITHIN THESE DOCUMENTS, USE THE REFERENCED EDITIONS FROM THE FBC CHAPTER 35 OR THE LATEST EDITIONS IF NOT REFERENCED: AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-2016: "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" STRUCTURAL CONCRETE: "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE: THE AMERICAN CONCRETE INSTITUTE (ACI 318-14 AND ACI 350-06) MASONKY: "BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES" THE MASONRY SOCIETY (TMS 402/602-16)
- STRUCTURAL STEEL: STEEL CONSTRUCTION MANUAL FIFTEENTH EDITION BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AICS 360-16)
- WOOD: "NATIONAL DESIGN SPECIFICATION" AND SUPPLEMENT (ANSI/AWC NDS-18) 2. <u>LIVE LOADS (REDUCIBLE BY CODE):</u> ROOF
- UNINHABITABLE ATTIC DESIGNATED ATTIC STORAGE AREA 20 PSF SLAB ON GRADE 100 PSI

3. <u>SUPERIMPOSED DEAD LOADS:</u> CEILING/ROOFING/MEP I 0 PSF

- <u>WIND LOAD DESIGN DATA:</u> WIND LOADS SHALL BE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE (REFERENCING ASCE 7-16). MAIN WIND FORCE RESISTING SYSTEM WIND DESIGN DATA: ULTIMATE DESIGN WIND SPEED, 3 SECOND GUST, VULT. 125 MPH HURRICANE PRONE REGION WINDBORNE DEBRIS REGION BUILDING RISK CATEGORY WIND EXPOSURE CATEGOR
- WIND TOPOGRAPHIC FACTOR (KZT) ENCLOSURE CATEGORY PARTIALLY OPEN INTERNAL PRESSURE COFFEICIENT +/- 0.18 18 FEET MEAN ROOF HEIGHT WIND DIRECTIONALITY FACTOR, KD 0.85
- VELOCITY PRESSURE COEFFICIENT (KH) 0.88 29.9 PSF ULTIMATE VELOCITY PRESSURE (QH[ULT]) M. COMPONENT & CLADDING WIND PRESSURES N. DIMENSION "a" SEE TABLE THIS SHEET D. GOUND ELEVATION FACTOR, KE
- 5. DISTRIBUTE THE MAXIMUM LOAD HUNG FROM ANY STRUCTURAL MEMBERS FOR MEP DUCTWORK, PIPING ETC OVER THE MEMBER'S TRIBUTARY AREA IN A WAY THAT THE DESIGN SUPERIMPOSED DEAD LOADS LISTED IN CONTRACT DOCUMENTS ARE NOT EXCEEDED. THE CONTRACTOR SHALL COORDINATE THE LOADS OF ALL TRADES AND PROVIDE ADDITIONAL SUPPORT OR DISTRIBUTION FRAMING AS REQUIRED TO ACHIEVE THE ALLOWABLE LOAD DISTRIBUTION 6. STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATING EQUIPMENT. MOUNT VIBRATING EQUIPMENT ON

STRUCTURAL STEEL

VIBRATION ISOLATORS.

- STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS: ROLLED SHAPES: ASTM A572 OR A992, MIN. YIELD STRENGTH 50 KSI MISCELLANEOUS ANGLES: ASTM A30 HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B, MIN YIELD STRENGTH 42 KSI FOR ROUND AND 46 KSI FOR RECTANGULAR HSS PLATES ASTM A36, MIN YIELD STRENGTH 36 KSI W-SHAPES & WT-SHAPES ASTM A992 C-SHAPES & MC-SHAFLS ASTM A36 ANGLES & PLATES ASTM A36 HIGH STRENGTH BOLTS ASTM A325 (STEEL-TO-STEEL CONNECTIONS) BOLTS ASTM A307 (STEEL-TO-WOOD CONNECTIONS) C-SHAPES & MC-SHAPES ASTM A36 WELDED HEADED STUDS ASTM A108 WELDING ELECTRODES AWS DI.I, E70 SERIES NUTS: WASHERS: ASTM A563 ASTM F436 2. ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OF ANCHOR BOLTS OR RODS (PER 3. ALL WELD OPERATORS SHALL BE CURRENTLY AWS QUALIFIED.
- 4. SHOP CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED. USE 3/16" FILLET WELD MINIMUM.
- 5. FIFI D CONNECTIONS SHALL BE WELDED OR HIGH STRENGTH BOLTED AS DETAILED. ALL BOLTS SHALL BE FASTENED TO
- SNUG-TIGHT CONDITION. USE 3/16" FILLET WELD MINIMUM. 6. SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS UNLESS APPROVED OTHERWISE BY THE SER IN WRITING.
- 7. SHOW ALL COPES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR
- ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.
- 8. FIELD MODIFICATION OF STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ARCHITECT AND STRUCTURAL ENGINEER.
- 9. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE, ANSI/AWS DI.I, LATEST EDITION. ALL WELD SIZES SHALL BE THE LARGER OF THE SIZE REQUIRED BY CONNECTION FORCES, THE MINIMUM SIZE PER ANSI/AWS D I . I , OR 3/1 G INCH MINIMUM FILLET WELD UON. ANY WELD SIZES SHOWN ON THE DESIGN DRAWINGS ARE CONSIDERED EFFECTIVE WELD SIZES AND SHALL BE INCREASED IN ACCORDANCE WITH AWS AS REQUIRED BY GAPS OR SKEWS BETWEEN COMPONENTS.

REINFORCEMENT

REINFORCING BARS: ASTM AG15, GRADE 60 REINFORCEMENT PLACEMENT (UNO) A. WELDED PLAIN WIRE MESH: ASTM A 185, MINIMUM YIELD STRESS OF 60 KSI CONCRETE REINFORCEMENT (

BELOW GRADE: UNFORMED 3" CLEAR FORMED 2" CLEAR CENTER REBAR IN MASONRY CELLS UON.

- REINFORCEMENT SPLICE LAP REINFORCEMENT: 48 BAR DIAMETERS LAP WELDED WIRE MESH: 8"
- DO NOT USE REBAR STAKES AS CHAIRS. CHAIRS SHALL BE MASONRY OR NON-CORROSIVE SUPPORTS SUCH AS PLASTIC.

CAST-IN-PLACE CONCRETE

. CONCRETE NORMAL WEIGHT STRUCTURAL CONCRETE

MINIMUM 28-DAY COMPRESSIVE STRENGTH, fc: 3,000 PSI PROVIDE NORMAL WEIGHT CONCRETE WITH CURED DENSITY OF 145 +/- 5 PCF, AND AGGREGATE CONFORMING TO ASTM C33, UON. THE USE OF CALCIUM CHLORIDE AND OTHER CHLORIDE CONTAINING AGENTS IS PROHIBITED. THE USE OF RECYCLED CONCRETE IS PROHIBITED. PLACEMENT WITHIN AND CONTACT BETWEEN ALUMINUM ITEMS, INCLUDING ALUMINUM CONDUIT, AND CONCRETE IS PROHIBITED. ALL CAST-IN-PLACE CONCRETE WILL EXPERIENCE DIFFERING VARIATIONS OF CRACKING. ANY ELEMENT EXPOSED TO DIRECT WEATHER AND/OR TEMPERATURE VARIATIONS DURING CONSTRUCTION OR IN THE FINAL CONDITION IS TO BE TREATED AND REGULARLY MAINTAINED TO PREVENT PROPAGATION OF CRACKS AND WATER PENETRATION. THE CONTRACTOR SHALL DEVELOP A REGULAR MAINTENANCE PROGRAM AND SUBMIT IT TO THE OWNER. MAXIMUM W/C RATIO OF 0.50 FOR FOOTINGS AND 0.45 FOR OTHER CONCRETE. CMU GROUT SHALL HAVE W/C RATIO OF 0.60 OR HIGHER. ALL FORMWORK SHALL BE DESIGNED, ERECTED, SUPPORTED, BRACED, AND MAINTAINED ACCORDING TO ACI 347, RECOMMENDED STANDARD PRACTICE FOR CONCRETE FORMWORK. RESPONSIBILITY: THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK, SHALL BE THE RESPONSIBILITY OF HE GENERAL CONTRACTOR. 8. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED UNLESS OTHERWISE SHOWN ON THE ARCHITECTURAL OR

 THE CONTRACTOR SHALL EMPLOY A TESTING LABORATORY TO PREPARE TEST CYLINDERS REPRESENTING CONCRETE POURED EVERY DAY, ONE SET PER DAY OR ONE SET MINIMUM FOR EACH 50 CUBIC YARDS POURED. THE TESTING LABORATORY TECHNICIAN SHALL BE PRESENT AT THE BEGINNING OF EACH POUR. LABORATORY REPORT SHALL BE FURNISHED TO THE STRUCTURALENGINEER SHOWING STRENGTH OF CONCRETE AT 7 AND 28 DAYS.

<u>WOOD</u>

. STRUCTURAL FRAMING PLANS DEPICT THE PRIMARY STRUCTURAL FRAMING SYSTEM, CONTRACTOR SHALL PROVIDE SECONDARY AND MISCELLANEOUS FRAMING AS REQUIRED TO COMPLETE THE PROJECT (SEE ARCHITECTURAL DRAWINGS) 2. DRESSED SEASONED LUMBER: S4S, 19% MAXIMUM MOISTURE CONTENT AT TIME OF DRESSING A. STUDS AND COLUMNS - SOUTHERN PINE #2 OR STRONGER [NOTE: WHERE CYPRESS FRAMING IS INDICATED, USE 4. BALD CYPRESS NO. 2 OR BETTER.] B. LINTELS, FLOOR JOISTS AND BEAMS: SOUTHERN PINE, NO. 2 GRADE [NOTE: WHERE CYPRESS FRAMING IS INDICATED, USE BALD CYPEESS NO. 2 OR BETTER.] C. WOOD IN CONTACT WITH CONCRETE OR MASONRY OR EXPOSED TO WEATHER: ABOVE GRADE PRESSURE-TREATED (AWPA-UC3A OR UC3B) OR GROUND CONTACT RATED PRESSURE TREATED (AWPA-UC4A). GROUND CONTACT RATED WOOD IS RECOMMENDED AT THE CRAWLSPACE AND DECK AREAS (IF PRESENT). USE HOT-DIP GALVANIZED NAILS IN PRESSURE TREATED WOOD. 3. STRUCTURAL PANELS

A. WALL PANELS: 1/2" APA RATED SHEATHING. ROOF PANELS: 1/2" APA RATED SHEATHING.

4. WOOD SHEAR WALLS PANELS SHALL BE ORIENTED WITH THE LONG DIMENSION IN THE VERTICAL DIRECTION. SOLID 2x BLOCKING SHALL BE PROVIDED AT UNSUPPORTED, HORIZONTAL PANEL EDGES. NAIL PANELS WITH & GALV. RINGSHANK NAILS SPACED AT 6" AT THE PERIMETER OF THE PANELS AND AT 12" AT NTERMEDIATE SUPPORTS, UNO

DOUBLE 2x FRAMING STUDS SHALL BE USED AT THE ENDS OF FACH SHEAR WALL UNO CONNECTIONS FOR STRUCTURAL TIMBER: GALVANIZED STRONG-TIE CONNECTORS BY THE SIMPSON STRONG TIE COMPANY OR APPROVED EQUAL. 5. LAMINATED VENEER LUMBER (LVL) SHALL BE WEVERHAUSE/TRUS JOIST MICROLLAM LVL (OR EQUAL) WITH FD NOT LESS PRE-ENGINEERED WOOD TRUSSES THAN 2.600 PSI AND MINIMUM 2.0E. 6. BOLTED CONNECTIONS SHALL CONSIST OF ASTM A307 BOLTS, FASTENED TO A SNUG-TIGHT CONDITION.

ASTM C90, NORMAL WEIGHT (MINIMUM 125 PCF) OR LIGHTWEIGHT (105 PCF) (MINIMUM 28 DAY

DIRECT CONTACT WITH SOIL; USE TYPE S MORTAR FOR ALL EXTERIOR AND INTERIOR LOAD-BEARING WALLS; USE TYPE N MORTAR FOR ALL EXTERIOR AND

ASTM C476 BY PROPORTION (MINIMUM 28 DAY

INTERIOR NON-LOAD-BEARING WALLS

COMPRESSIVE STRENGTH | 500 PSI)

OR 2350 PSI FOR N)

ONLY BY PROPORTION

ASTM AG | 5. GRADE GO

ASTM A572, GRADE 50.

ASTM A 185 OR ASTM A 497

ASTM A 82, AND ASTM A167

ASTM A366/A366M

F1554 GR.55

GALVANIZE PER ASTM A | 53

GALVANIZE PER ASTM A I 53

HIT-HY 270 BY HILTI, TULSA, OK

COMPRESSIVE STRENGTH 1900 PSI FOR S OR M

ASTM C270, TYPE S, M OR N PORTLAND CEMENT / LIME

ASTM A82, TRUSS OR LADDER TYPE SPACED AT 16" O.C.

ABBREVIATIONS

P.T. PRESSURE TREATED GALV. GALVANIZED A.B. ANCHOR BOLT

F.B.C. FLORIDA BUILDING CODE U.N.O. UNLESS NOTED OTHERWISE

MASONRY

CONCRETE MASONRY WORK SHALL CONFORM TO TMS 402/602-16, BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES. LOAD BEARING, NON-LOAD BEARING, AND BACKUP WALL CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO THE FOLLOWING MATERIAL STANDARDS:

CONCRETE BLOCK:
MORTAR:

C. MORTAR USAGE (UON ON DRAWINGS): USE TYPE S OR M MORTAR WHEN MASONRY IS IN

E. REINFORCEMENT JOINT REINFORCEMENT G. EXTERIOR JT REINF: INTERIOR JT REINF:

HAND MIXING MORTAR IS NOT ALLOWED.

D. MORTAR

SHELL JOINTS.

ADHESIVE ANCHORS: 3. MATERIAL SHALL CONFORM TO THE FOLLOWING, HOT-DIPPED GALV. EXCEPT AS NOTED: PLATE AND BENT BAR ANCHORS SHEET METAL ANCHORS AND TIES:

WIRE MESH TIES: WIRE TIES AND ANCHORS: ANCHOR BOLTS:

PIGMENTS WILL NOT DE ALLOWED IN MORTAR MIX UNLESS OTHERWISE SPECIFIED. PROVIDE HORIZONTAL JOINT REINFORCEMENT WITH NO. 9 GAGE HOT-DIP GALVANIZED LONGITUDINAL WIRES AT 16" VERTICALLY, UNLESS NOTED OTHERWISE. PROVIDE SPECIAL ACCESSORIES FOR CORNERS, INTERSECTIONS, ETC WHERE REQUIRED, REINFORCE JOINTS WITH LADDER-TYPE REINFORCEMENT CONFORMING TO ASTM A951 AT 16"

D.C. MEASURED VERTICALLY, LAP ALL JOINT REINFORCEMENT 6" MIN. THE MINIMUM COMPRESSIVE STRENGTH OF THE MASONRY (Fm) SHALL BE 1,500 PSI UON, VERIFIED BY THE UNIT STRENGTH METHOD IN ACCORDANCE WITH THE ABOVE REFERENCED SPECIFICATIONS. CALCIUM CHLORIDE SHALL NOT BE USED IN MORTAR OR GROUT. PROVIDE FULL FACE SHELL MORTAR COVERAGE ON MASONRY UNIT HORIZONTAL AND VERTICAL (BED AND HEAD) FACE

PROVIDE FULL MORTAR COVERAGE ON WEBS AROUND ALL GROUTED CELLS. LAY MASONRY UNITS IN RUNNING BOND UON WITH UNITS DESIGNED TO ALIGN WITH WEBS IN EACH COURSE. 2. REFER TO PLANS AND DETAILS FOR BONDED JOINT REQUIREMENTS AT WALL CORNERS AND INTERSECTIONS. USE (2) 24"X24" NO.4 CORNER BARS AT WALL CORNERS/INTERSECTIONS OF BOND BEAMS. 13. IF TEMPERATURE FALLS BELOW 40 DEG F. OR EXCEEDS 100 DEG. F SPECIAL CONSTRUCTION MEASURES SHALL BE

TAKEN AS PER FBC 2104.3 AND 2104.4. GROUT PLACEMENT STOPPED FOR ONE HOUR OR MORE SHALL BE STOPPED 1 1/2" BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A SHEAR KEY FOR SUBSEQUENT GROUTING.

15. SHORE ALL BEAMS AND LINTELS, PREFERABLY FOR NOT LESS THAN ONE WEEK, UNTIL CURED MASONRY STRENGTH REACHES 1,500 PSI.

FOUNDATION

- BEARING SOILS SHALL BE FREE OF ORGANIC MATERIAL AND MEET THE FBC REQUIREMENTS TO PROVIDE A MINIMUM OF 1,500 PSF SOIL BEARING DESIGN PRESSURES. PER TABLE R401.4.1 OF THE FLORIDA RESIDENTIAL BUILDING CODE. IT IS THE HOMEOWNER'S RESPONSIBILITY TO VERIFY THAT THE SOIL CONDITIONS ARE SUITABLE FOR THESE ASSUMPTIONS. IT IS SUGGESTED THAT PRIOR TO CONSTRUCTION A GEOTECHNICAL INVESTIGATION BE MADE TO VERIFY THE BEARING PRESSURE AND SUBSURFACE CONDITIONS, STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS ENCOUNTERED IN THE FIELD DIFFERENT FROM THOSE ASSUMED FOR DESIGN A. NOTE: SHALLOW SOIL BORINGS WERE REPORTEDLY OBTAINED ONSITE IN ACCORDANCE WITH THE SOIL BORING
- REPORT, DATED MAY I, 2017, BY FLORIDA SOIL AND ENVIRONMENTAL SERVICES. ENGINEERING RECOMMENDATIONS FOR DEVELOPMENT OF THE SITE WERE EXCLUDED FROM THE REPORT. PROVIDE TESTING ON SOIL COMPACTION PRIOR TO LAYING STEEL OR POURING CONCRETE, COMPACTION SHOULD ACHIEVE AT LEAST 95% MODIFIED PROCTOR DENSITY.
- REMOVE FREE WATER FROM EXCAVATIONS BEFORE PLACING CONCRETE. FOUNDATIONS SHALL BE ALLOWED TO SETTLE PRIOR TO COMMENCEMENT OF WOOD FRAMED CONSTRUCTION NOTIFY ENGINEER IMMEDIATELY IF CLAY SOILS OR ORGANIC MATERIALS ARE ENCOUNTERED DURING BUILDING PAD
- PREPARATION (AFTER CLEARING AND GRUBBING) 6. FILL, IF NEEDED, SHOULD BE PLACED IN 12-INCH MAXIMUM LOOSE LIFTS, WITH EACH LIFT COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST METHODI (ASTM D-1557) MAXIMUM DRY DENSITY VALUE. IF HAND HELD COMPACTION EQUIPMENT IS USED, THE MAXIMUM LOOSE LIFT
- THICKNESS SHALL BE 6 INCHES. FILL SHALL BE FREE OF ORGANIC MATERIALS, SUCH AS ROOTS AND/OR VEGETATION. USE SAND FILL (UNLESS APPROVED OTHERWISE) WITH BETWEEN 3 TO 12 PERCENT BY DRY WEIGHT PASSING THE U.S. STANDARD NO. 200 SIEVE. ALL FILL SHALL BE PREQUALIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO IMPORTING AND PLACING.

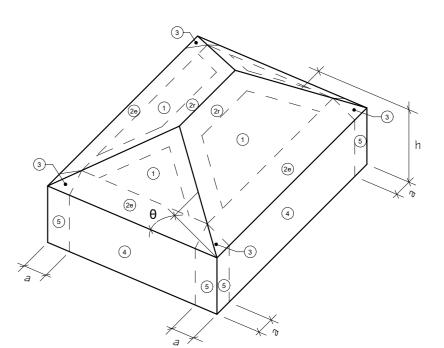
POST-INSTALLED ANCHORS



- I. DESIGN OF METAL CONNECTED ROOF TRUSSES SHALL COMPLY WITH: 2020 FLORIDA BUILDING CODE.
- TRUSS PLATE INSTITUTE'S DESIGN FOR LIGHT METAL PLATE CONNECTED ROOF TRUSSES. 2. PRE-ENGINEERED PRE-FABRICATED WOOD TRUSSES AND THEIR CONNECTIONS TO EACH OTHER SHALL BE DESIGNED FOR 20 PSF DEAD LOAD AND 20 PSF LIVE LOAD.
- 3. SIGNED AND SEALED SHOP DRAWINGS SHOWING TRUSS CONFIGURATION WITH MEMBER SIZES AND CONNECTIONS Design LOADS, DURATION FACTORS AND EXECTION DETAILS MUST BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. IF REQUIRED, SUBMIT COPIES TO THE BUILDING DEPARTMENT AT TIME OF PERMITTING.
- PRE-FABRICATED WOOD TRUSSES SHALL BE FABRICATED FROM SOUTHERN PINE (SPIB) KILN DRIED #2 OR BETTER FOR CHORDS AND #3 GRADE OR BETTER FOR WEBS.
- 5. NO WANE, SKIPS OR OTHER DEFECTS SHALL OCCUR IN THE PLATE CONTACT AREA OR SCARIFIED AREA OF WEB MEMBERS. PLATES SHALL BE CONNECTED WITH ONE REQUIRED EACH SIDE OF TRUSS. TRUSSES SHALL BE DESIGNED FOR MINIMUM LIVE LOADS SHOWN IN THESE NOTES
- HANDLING, ERECTION AND BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE LATEST EDITION AND AS NOTED BELOW
- AMOUNT AND TYPE OF TRUSS UPLIFT STRAPPING SHALL BE VERIFIED W/ TRUSS ENGINEER'S SHOP DRAWINGS AND CALCULATION AND ADJUSTED ACCORDINGLY, AS NEEDED. PROPER ERECTION BRACING SHALL BE INSTALLED TO HOLD THE TRUSSES TRUE AND PLUMB AND IN SAFE CONDITION UNTIL PERMANENT TRUSS BRACING AND BRIDGING CAN BE SOLIDLY NAILED IN PLACE TO FORM A STRUCTURALLY SOUND FRAMING SYSTEM, ALL FRECTION AND PERMANENT BRACING SHALL BE INSTALLED AND ALL COMPONENTS PERMANENTLY FASTENED BEFORE THE APPLICATION OF ANY LOADS TO THE TRUSSES. ALL BRACING SHALL BE DESIGNED BY MANUFACTURER AND INDICATED ON SHOP DRAWINGS. CONTRACTOR SHALL COORDINATE WITH TRUSS FABRICATOR TO ENSURE THAT ALL BRACING IS PROVIDED INCLUDING BOTTOM CHORD BRACING BY WAY OF CEILING SHEATHING OR SPECIFIC BRACES AT PREDETERMINED LOCATIONS (AT DROPPED SUSPENDED CEILING), ALL PREFABILIATED WOOD TRUSSES ARE TO BE INSTALLED IN ACCORDANCE WITH BRACING WOOD TRUSSES COMMENTARY, "HANDLING AND ERECTING WOOD TRUSSES", AS PUBLISHED BY THE TRUSS PLATE INSTITUTE. PROVIDE

STRONG BACK BRACKING AT TRUSSES PER REQUIREMENTS FROM TRUSS DESIGNER. COMPONENT-TO COMPONENT CONNECTIONS SHALL BE SPECIFIED ON PRE-ENGINEERED TRUSS DESIGN SUBMITTAL.

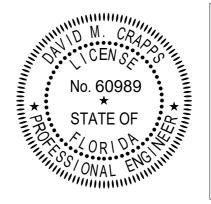
	SHEET S1
	David M. Crapps, P.E. Structural Engineer 603 Pine Avenue SW Live Oak, Florida 32064 Ph: 214-537-2007 dmcstructural@outlook.com
	GENERAL NOTES
	DESIGNED BY: D. CRAPPS - P.E. # 60989 CHECKED BY: D. CRAPPS - P.E. # 60989 DRAWN BY: B. HARRIS
d sealed by ot e signature vies.	MC FALL RESIDENCE 9515 NW 62ND LANE GAINESVILLE, FLORIDA 32653 DMC PROJECT NO. 1522



WINDLOAD PLAN DIAGRAM HIP ROOF | 2" = |'-0"

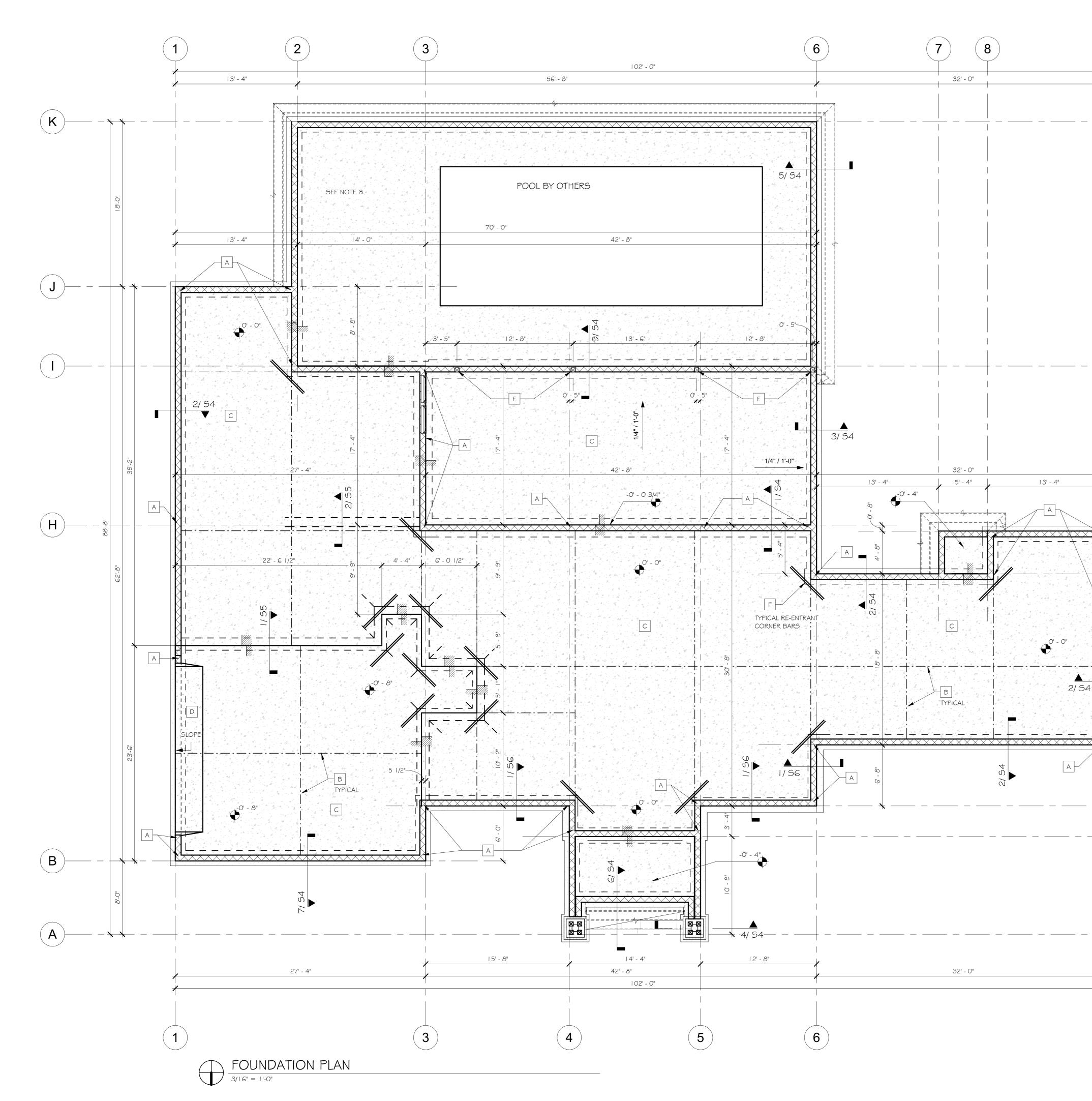
	COMPONENTS AND CLADDING WIND PRESSURES ON HIPPED ROOF AND WALLS (PSF)											
ZONE	1,2,3	I	2e	2r	3	2e Overhang	2r Overhang	3 Overhang		4	5	5
TRIB AREA	(+)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(-)	(+)	(-)
10	26	-47	-65	-65	-65	-80	-80	-98	35	-38	35	-47
20	23	-42	-58	-58	-58	-75	-75	-81	34	-37	34	-44
50	18	-35	-50	-50	-50	-71	-71	-68	32	-35	32	-40
100	14	-29	-43	-43	-43	-68	-68	-59	30	-33	30	-37
200	14	-29	-35	-35	-35	-65	-65	-50	28	-32	28	-34
500	14	-29	-35	-35	-35	-65	-65	-50	26	-29	26	-29

FOR THE SELECTION OF WINDOW AND DOOR PRODUCTS, TABULATED VALUES SHOWN ARE NORMALLY MULTIPLIED BY 0.6 PRIOR TO COMPARISON WITH THE POSITIVE AND NEGATIVE PRESSURE RATINGS PROVIDED IN EACH FLORIDA PRODUCT APPROVAL. IT IS RECOMMENDED THAT THE MANUFACTURER'S REPRESENTATIVE REVIEW THESE DRAWINGS FOR VERIFICATION.



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PLAN NOTES:

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- I. LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION FOR NEW FOOTINGS.
- 2. NEW FOUNDATIONS SHALL BE ALLOWED TO SETTLE PRIOR TO COMMENCEMENT OF WOOD-FRAMED CONSTRUCTION.
- 3. MAINTAIN POSITIVE SLOPE FOR FINISHED GRADE AWAY FROM NEW FOUNDATIONS PER CODE.
- 4. FIELD VERIFY DIMENSIONS AS REQUIRED.
- 5. REFER TO ARCHITECTURAL FOR TERMITE TREATMENT OF SUB-GRADE
- 6. SLAB ELEVATIONS SHOWN ARE RELATIVE TO AN ARBITRARY SET REFERENCE DATUM OF O'-O" ACTUAL ELEVATIONS CAN BE PROVIDED BY A LICENSED SURVEYOR.
- 7. MAXIMUM SPACING OF SAWCUT CONTROL JOINTS IN SLAB SHALL BE APPROXIMATELY 15 FEET IN EACH DIRECTION, WITH LENGTH-TO-WIDTH RATIO OF 1.5 OR LESS AT EACH INDIVIDUAL RECTANGULAR AREA. SAWCUT DEPTH SHALL BE 25 PERCENT OF THE SLAB DEPTH. SAWCUT WORK SHALL BE PERFORMED THE SAME DAY AS THE SLAB PLACEMENT, BUT AFTER THE CONCRETE HAS CURED SUFFICIENTLY TO PREVENT RAVELING. EXTERIOR JOINTS SHALL BE FILLED WITH SILICONE SEALANT AND BACKER ROD (OR EQUAL). CONTRACTOR TO COORDINATE SEALING OF INTERIOR JOINTS WITH FLOOR FINISHES.
- 8. CONTROL JOINT LAYOUT AT POOL DECK TO BE COORDINATED WITH POOL CONFIGURATION
- 9. THE SIZE OF THE WELDED WIRE MESH INDICATED IS RECOMMENDED BY THE STRUCTURAL ENGINEER. HOWEVER, AT THE OWNER AND CONTRACTOR'S RISK, OF INCREASED CRACK DEVELOPMENT, 6XG-WI.4XWI.4 WELDED WIRE MESH MAY BE SUBSTITUTED IN ACCORDANCE WITH THE FLORIDA RESIDENTIAL CODE R506.2.4.2.
- 10. FIBER REINFORCED CONCRETE, IF SELECTED, SHALL BE CONCRETE MANUFACTURER'S FIBER MIX THAT COMPLIES WITH THE FLORIDA RESIDENTIAL CODE SECTION R506.2.4.2. MIX SHALL CONTAIN MICRO-OR MACRO-SYNTHETIC FIBER REINFORCEMENT, WITH FIBER LENGTHS OF 1/2" TO 2-1/4". DOSAGE AMOUNTS SHALL BE FROM 1.5 TO 3.0 POUNDS PER CUBIC YARD, AND SYNTHETIC FIBERS SHALL COMPLY WITH ASTM C111G.

FOUNDATION PLAN KEYNOTE LEGEND

- A SIMPSON HTT4 HOLDOWN WITH 5/8" DIAMETER HOT DIPPED GALV. THREADED ROD. DRILL AND EPOXY (6" EMBEDMENT). PROVIDE NOT LESS THAN (2) 2X6 STUD PACK, UNLESS NOTED ADDITIONAL STUDS ARE ON PLAN OR HEADER SCHEDULE ON DETAIL 2/S6.
- B SUGGESTED SLAB-ON-GRADE CONTROL JOINT LOCATION. SEE NOTE 7.
- C 4" CONCRETE SLAB-ON-GRADE OVER 6-MIL POLYETHYLENE VAPOR RETARDER OVER COMPACTED AND TERMITE TREATED SUGRADE. REINFORCE SLAB WITH ONE OR MORE OF THE FOLLOWING: I. W2.9XW2.9-6"X6" WELDED WIRE MESH (SEE NOTE 9)
- 2. #3 @ 18" O.C. EACH WAY __3. FIBER REINFORCED CONCRETE. (SEE NOTE 10)
- D OPTIONAL APRON FOR SURFACE DRAINAGE AT GARAGE ENTRANCE.
- E P.T. 6X6 COLUMN WITH SIMPSON CBS66Z BASE AND MANUFACTURER'S I" HOT DIPPED GALV. STANDOFF, WITH (2) 5/8" DIAMETER HOT DIPPED GALV. THROUGH BOLTS. [NOTE: COLUMN BASE WILL NEED TO BE EMBEDDED IN THE CONRETE POUR.]
- F (2) #4X5'-0" LONG RE-ENTRANT CORNER BARS

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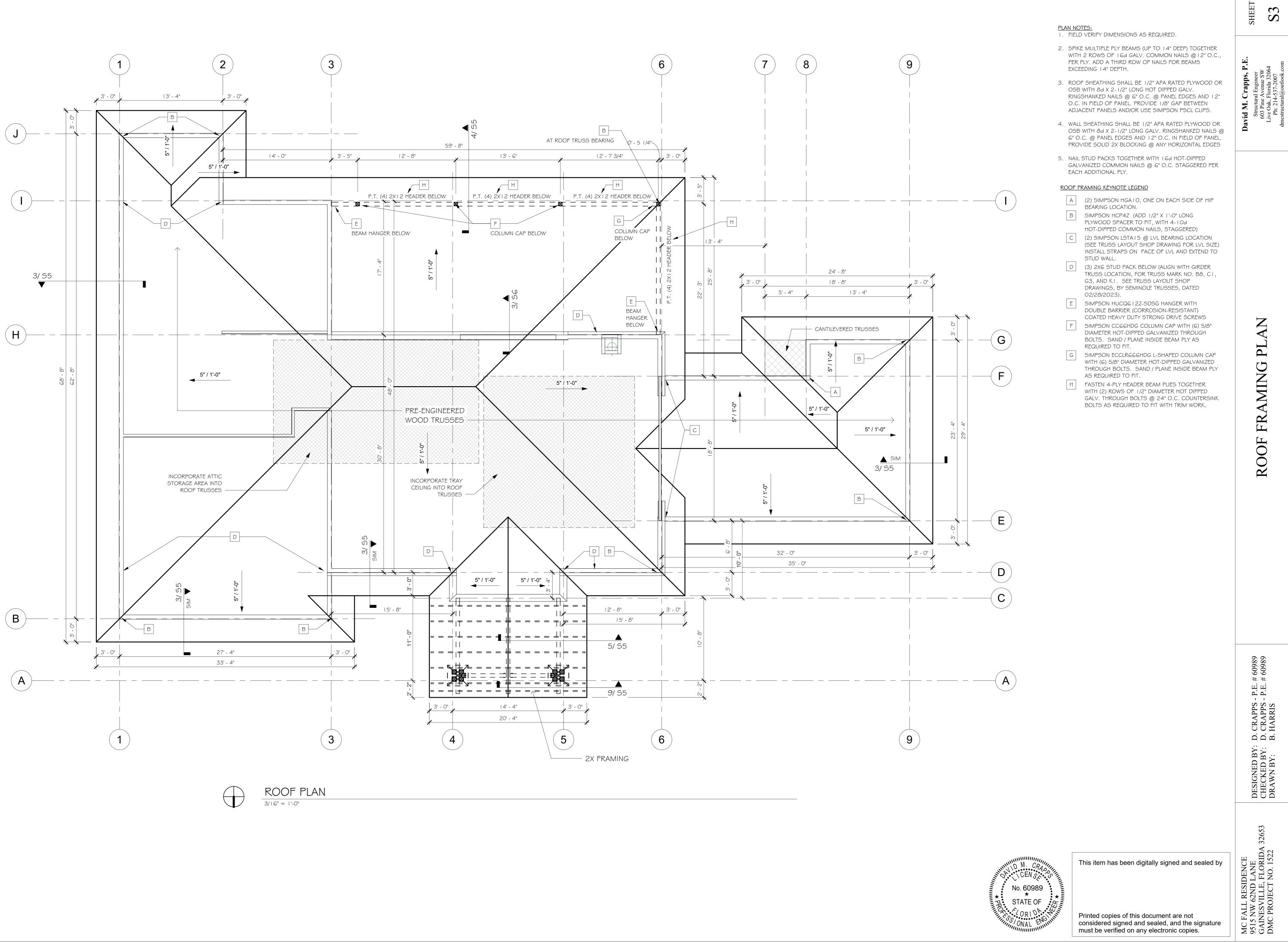
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DESIGNED BY: D. CRAPPS - P.E. # 60989	CHECKED BY: D. CRAPPS - P.E. # 60989	B. HARRIS
DESIGNED BY:	CHECKED BY:	DRAWN BY:

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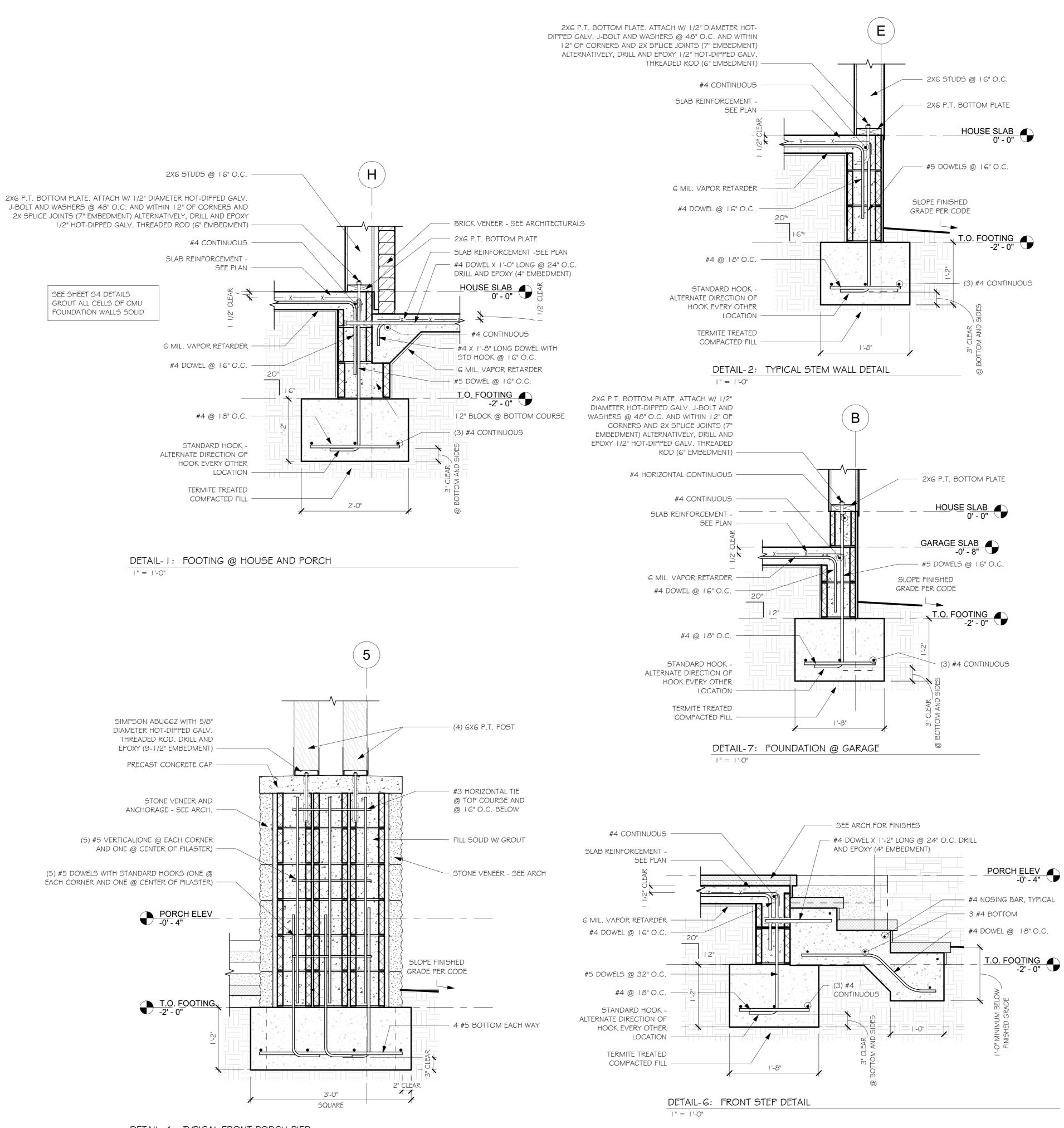
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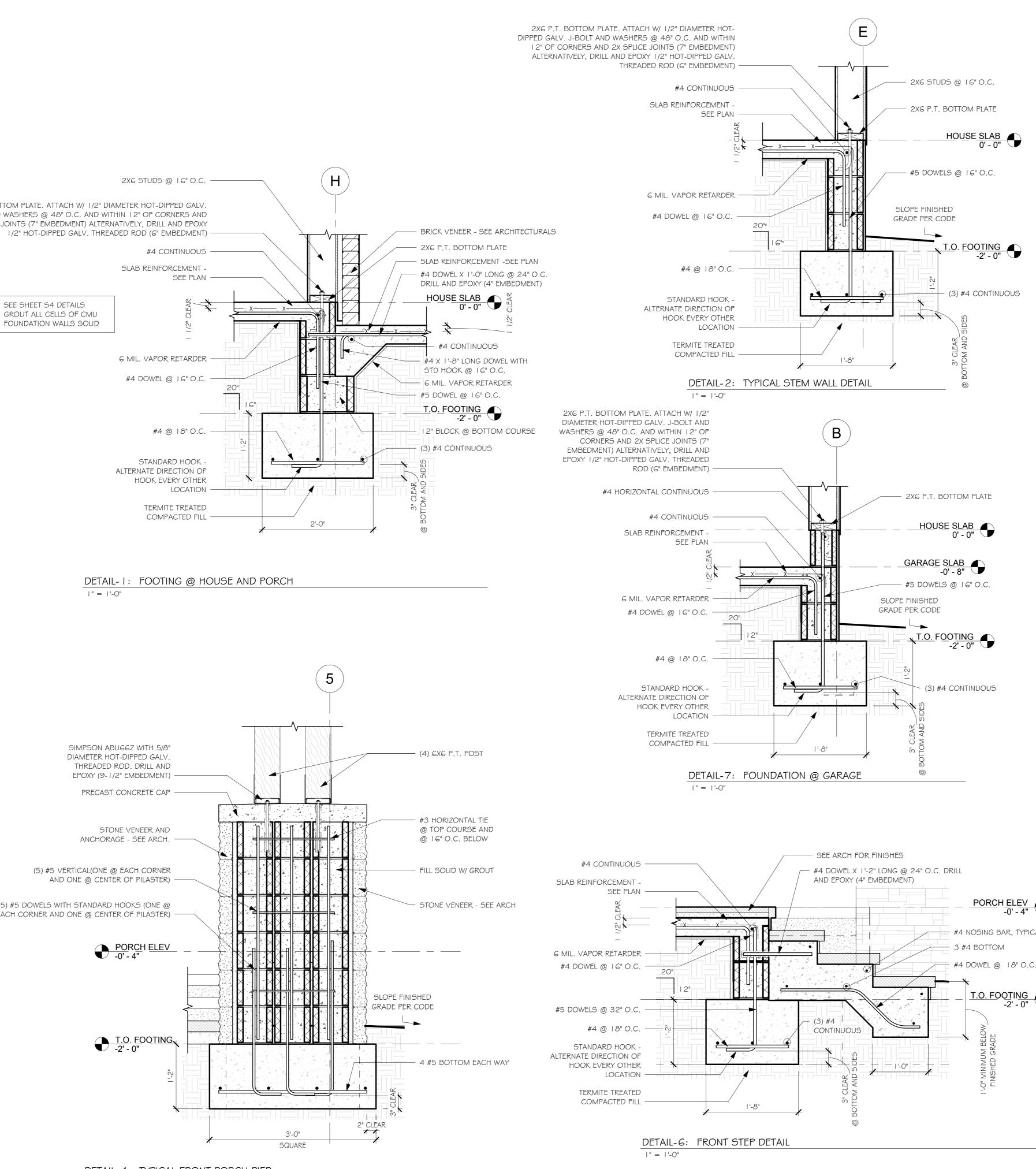




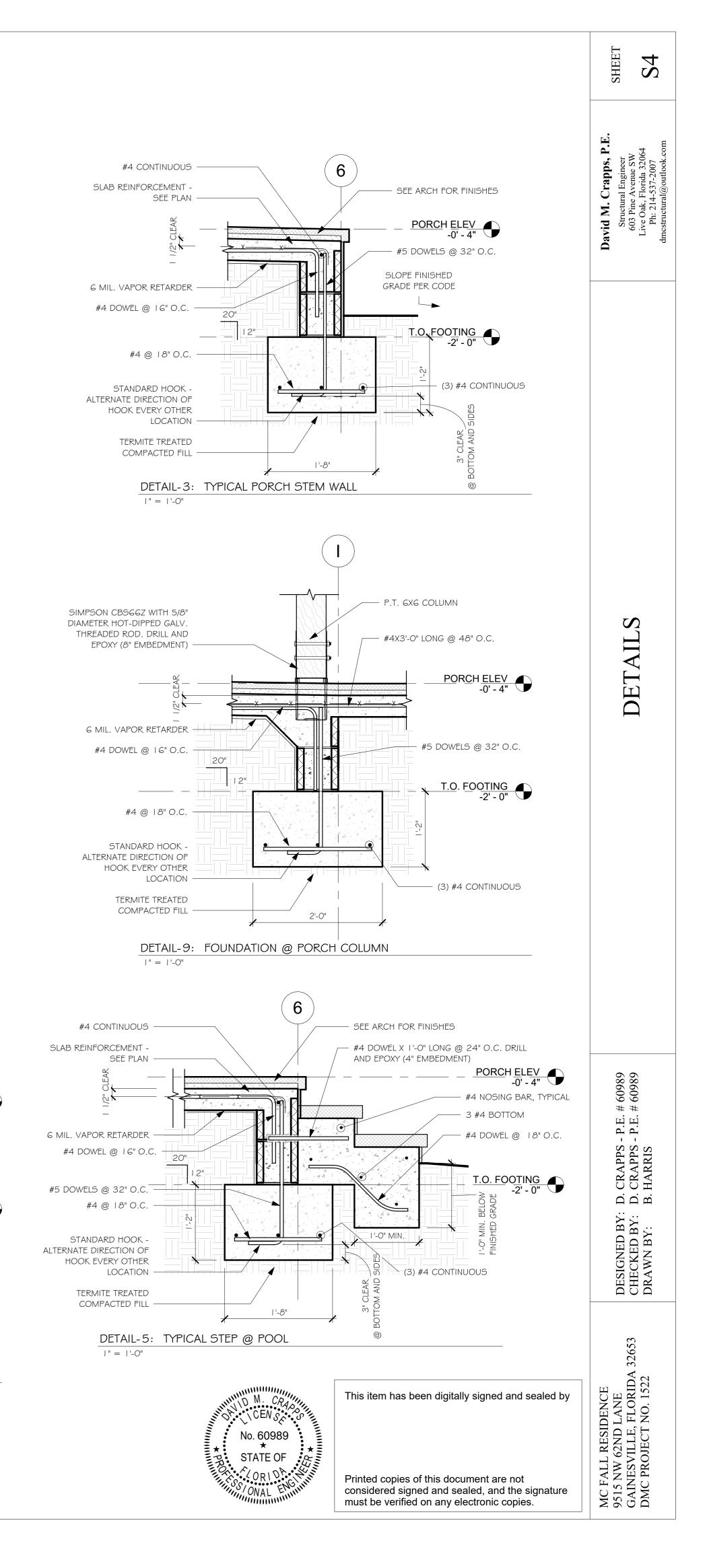
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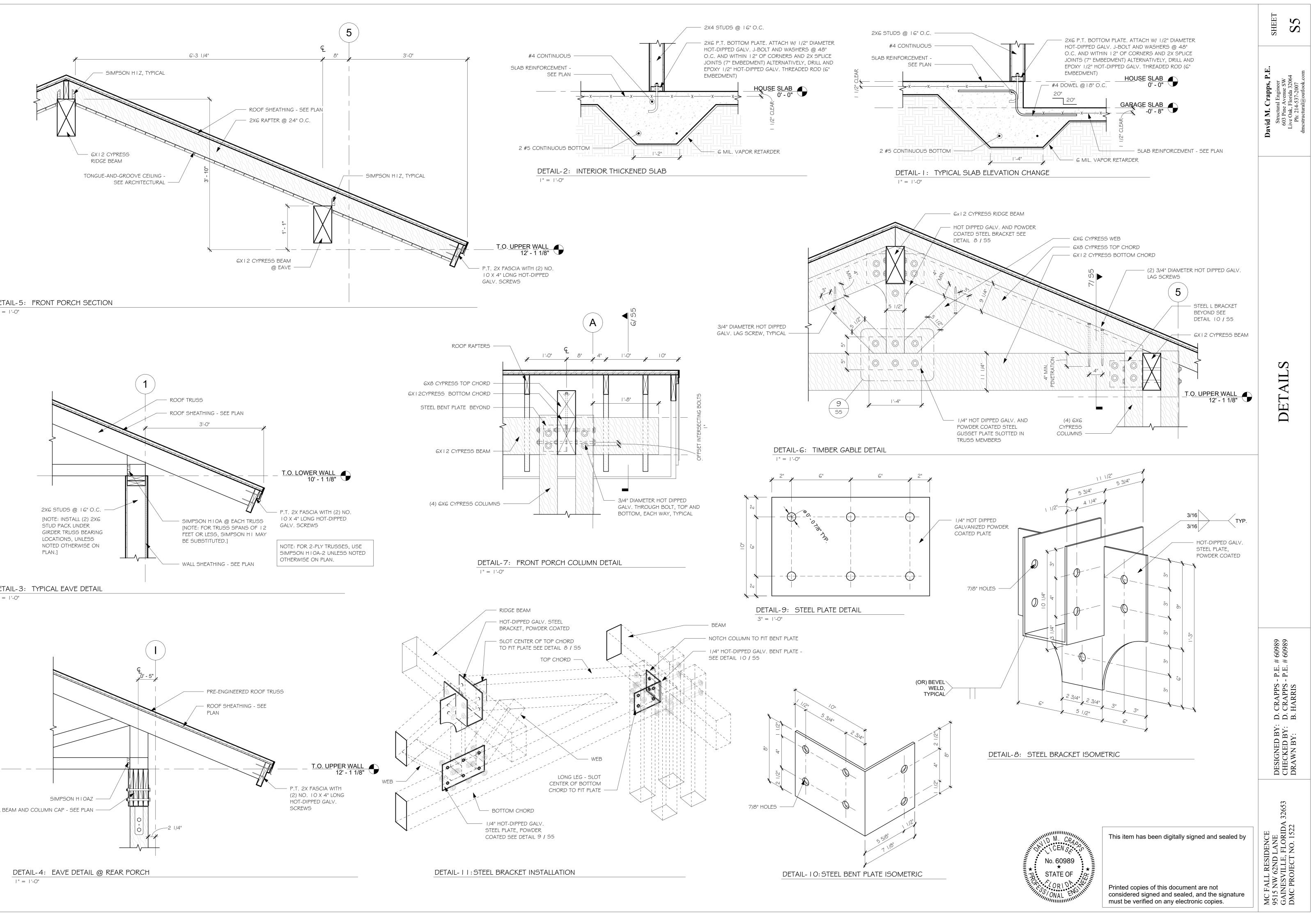
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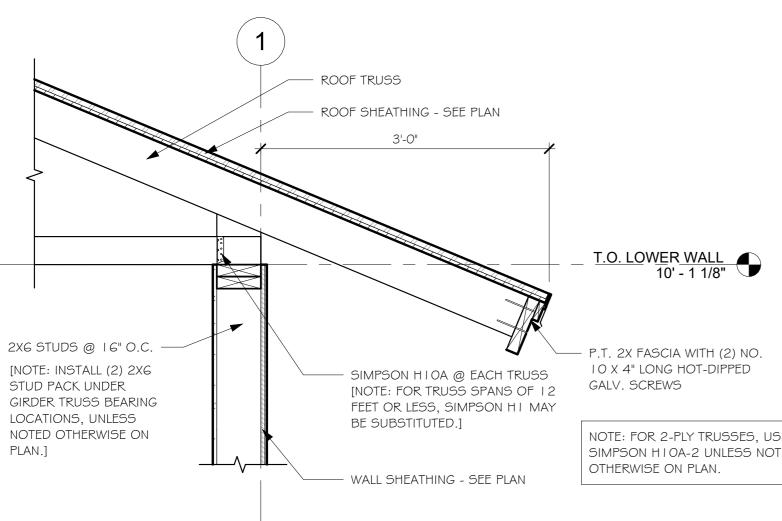


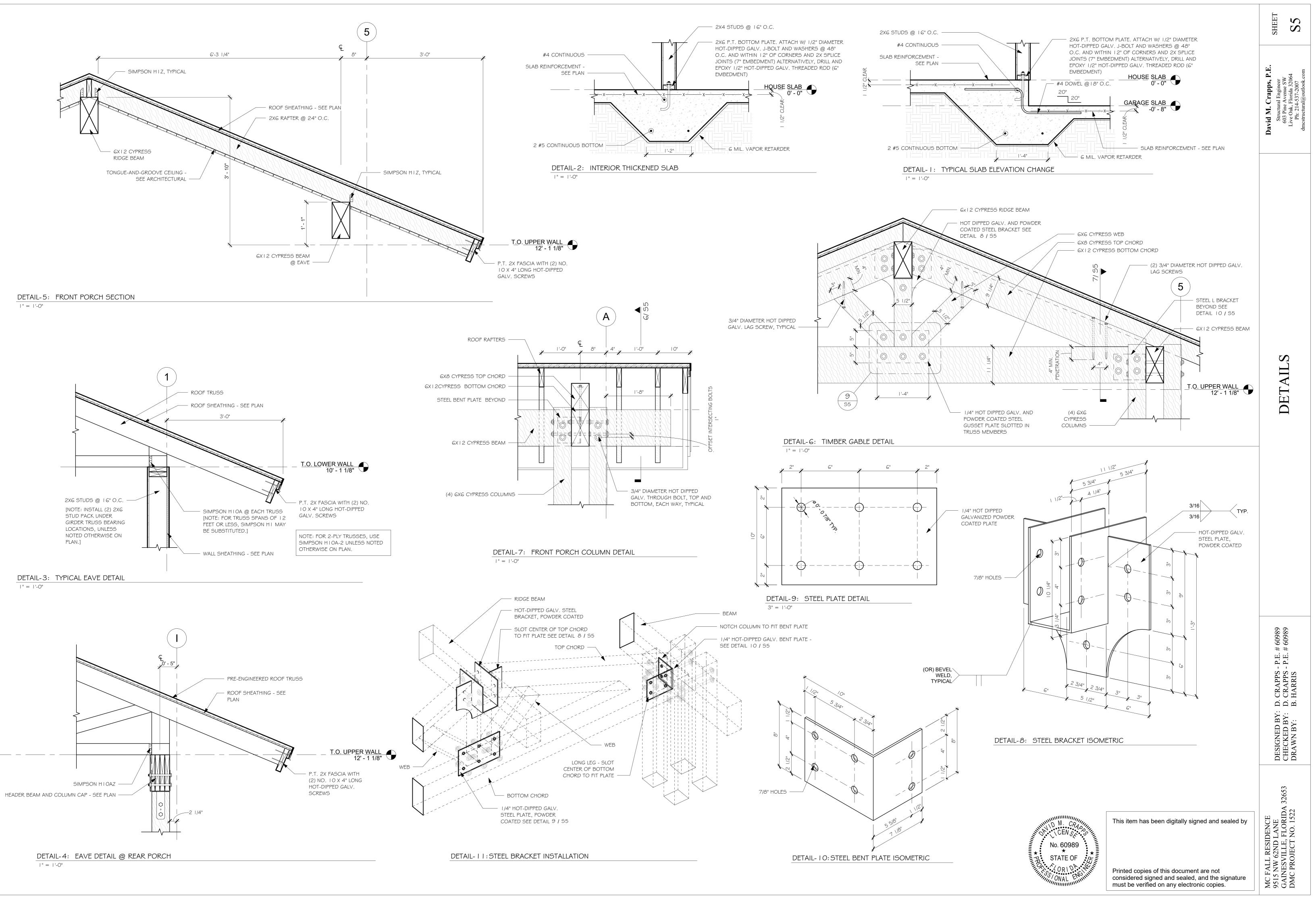


DETAIL-4: TYPICAL FRONT PORCH PIER | = | -0|



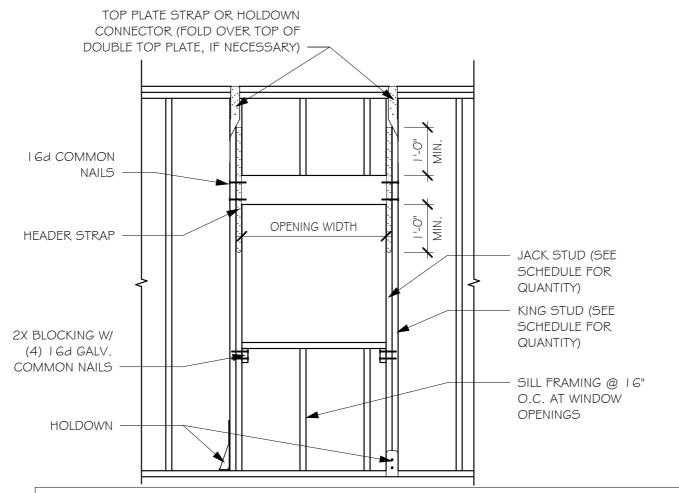






NOTES:

2X6 P.T. BOTTOM PLATE. ATTACH W/ 1/2" DIAMETER HOT-DIPPED GALV. J-BOLT AND WASHERS @ 48" O.C. AND WITHIN I 2" OF CORNERS AND 2X SPLICE JOINTS (7" EMBEDMENT) ALTERNATIVELY, DRILL AND EPOXY 1/2" HOT-DIPPED GALV.



HEADER SCHEDULE

MAXIMUM OPENING WIDTH	HEADER SIZE	Jack Studs	Kıng Studs		on Strong -Tie onnectors Header	Holdown
4' - O"	(3) 2x6	(1) 2x6	(1) 2x6	HG	LSTA30	DSPZ
6' - 0"	(3)2X8	(I) 2x6	(2) 2x6	HG	(2) LSTA30	DTT2Z*
O' - O''	(3)2X 2	(2) 2x6	(2) 2x6	(2)HG	(2) LSTA30	DTT2Z*
2' - 0"	(3) -3/4" X - /4" LVL	(2) 2x6	(2) 2x6	(2) HG	(2) LSTA30	HTT4*
8 ¹ - 0"	(3) -3/4" X 6" LVL	(2) 2x6	(3) 2x6	(2) HG	(2) LSTA30	HTT4*

* DRILL AND EPOXY HOT-DIPPED GALVANIZED THREADED ROD (1/2" DIAMETER FOR DTT2Z, 5/8" DIAMETER FOR HTT4), 6" EMBEDMENT.

I. ALL LUMBER SHALL BE SOUTHERN PINE NO. 2 OR BETTER OR SPRUCE PINE FUR NO.2 GRADE OR STRONGER.

2. USE PLYWOOD SPACERS BETWEEN HEADER PLIES AS REQUIRED TO MATCH STUD DEPTH.

3. NAIL STUD PACKS TOGETHER WITH I 6d GALV COMMON NAILS @6"O.C. STAGGERED.

4. INTERIOR NON-LOAD BEARING WALL HEADERS SHALL BE NOT LESS THAN CODE MINIMUMS.

5. USE 8d GALV. COMMON NAILS ON SIMPSON HG, FULLY NAILED.

6. USE 10d GALV. COMMON NAILS ON SIMPSON CS16, FULLY NAILED.

7. SIMPSON CS I 6 MAY BE SUBSTITUTED FOR LSTA30.

8. INSTALL HEADER STRAPS FROM THE INSIDE FACE OF WALL. IF THE TABLE CALLS FOR 2 HEADER STRAPS AT 1 JACK STUD,

INSTALL I STRAP ON INSIDE FACE OF WALL AND I STRAP ON THE EXTERIOR FACE OF WALL. STAGGER NAIL LOCATIONS AS

REQUIRED.

DETAIL-2: HEADER SCHEDULE

|/2" = |'-0"

LOOSE LINTEL SCHEDULE					
CLEAR SPAN	SIZE	MINIMUM LENGTH OF BEARING AT EACH JAMB			
UP TO 9'-0"	L 4X4X1/4	8 INCHES			
UP TO 9'-0"	L 4X4X1/4	8 INCHES			

NOTES:

I. ALL LOSE LINTELS SHALL BE HOT-DIPPED GALVANIZED

2. DO NOT PLACE VERTICAL EXPANSION JOINT OVER WALL OPENINGS WITH LOOSE LINTELS

3. PROVIDE TEMPORARY SHORING OF LINTELS UNTIL THE MORTAR CURES TO AT LEAST 75% OF IT'S SPECIFIED DESIGN STRENGTH

4. BRICK TIES SHALL BE INSTALLED AT NOT MORE THAN 18" O.C. EACH WAY.

DETAIL-4: LOOSE LINTEL SCHEDULE

1/2" = 1'-0"

| = | -0|

