

JERICHO TRAIL
EUSTIS, FLORIDA 32736

RELEASE DATE:
MAY 2, 2023

A CUSTOM DESIGN JERICHO

COUNTY OF LAKE
STATE OF FLORIDA

ALL FEDERAL STATE & LOCAL CODES, ORDINANCES, AND REGULATIONS, ETC. SHALL BE CONSIDERED AS PART OF THE SPECIFICATIONS OF THIS BUILDING, AND ARE TO BE ADHERED TO EVEN IF THEY ARE IN VARIANCE WITH THE PLAN.

DESIGNER AND ENGINEER ASSUME NO RESPONSIBILITY OVER ANY PHASE OF CONSTRUCTION OR COMPLETED BUILDING.

TERMITE SPECIFICATIONS

SECTION R318 PROTECTION AGAINST TERMITES

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE AS PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITICIDES). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES." PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS

NOTES:

- METHOD OF TREATMENT SHALL BE APPROVED BY THE GOVERNING JURISDICTION. LIQUID PRODUCT APPROVAL DATA MUST BE ON FILE WITH THE BUILDING DEPARTMENT.
- BORATE OR BORA-COR PRODUCT METHODS MUST BE DETERMINED AT PERMIT STAGE AND PRESSURE TREATED LUMBER THAT HAS BEEN CUT OR DRILLED THAT EXPOSES UNTREATED PORTIONS OF WOOD ARE REQUIRED TO BE FIELD TREATED TO PREVENT INSECT INFESTATION.
- OPTIONAL BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" A.F.F.

- NOTICE TO BUILDER AND ALL SUBCONTRACTORS -

IT IS THE INTENT OF THE ENGINEER LISTED IN THE TITLEBLOCK OF THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO:

- REVIEW ALL THE INFORMATION CONTAINED IN THESE DOCUMENTS, PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNLESS THEY ARE NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
- SHALL STRICTLY OBSERVE ALL APPLICATION CODES DURING THE COURSE OF CONSTRUCTION INCLUDING ALL STATE, CITY, AND COUNTY BUILDING, ZONING, ELECTRICAL, MECHANICAL, PLUMBING AND FIRE CODES. CONTRACTOR SHALL VERIFY ALL CODE REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
- THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR SAFETY PROCEDURES, THE MEANS AND METHODS OF CONSTRUCTION, TECHNOLOGIES, OR THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS OR RELATED CODES.
- THE FRAMING PLAN SHOWN INDICATES THE "TRUSS SYSTEM" AND IS THE RESPONSIBILITY OF THE TRUSS SYSTEM ENGINEER (DESIGN PROFESSIONAL OF RECORD). THE TRUSS DESIGN ENGINEER (DELEGATED ENGINEER) HAS FINAL RESPONSIBILITY FOR EACH INDIVIDUAL TRUSS AND TRUSS PROFILE, AND IS TO SUBMIT A FINAL SET OF TRUSS ENGINEERING SIGNED AND SEALED TRUSS DRAWINGS TO DESIGN PROFESSIONAL OF RECORD FOR REVIEW PRIOR TO FABRICATION.
- ANY DISCREPANCY OR ERROR IN DIMENSIONS OR NOTES WITH THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL FOR CLARIFICATION PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS. ANY QUESTIONS REGARDING THE INFORMATION FOUND IN THESE PLANS SHOULD BE DIRECTED TO OUR QUALITY ASSURANCE MANAGER AT 321-971-0861 IMMEDIATELY. NO BACK CHARGES WILL BE CONSIDERED FOR REIMBURSEMENT BY THE ENGINEER WITHOUT ADVANCED NOTIFICATION AND APPROVAL BY THE ENGINEER. PAYMENTS WILL BE MADE IN ACCORDANCE TO THE TERMS OF THE AGREEMENT.

PER FBC 2020 7TH EDITION, RESIDENTIAL VOLUME R703.1.1:
LATH AND LATH ANCHORS SHALL BE OF CORROSION-RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED WITH 1/2" LONG (38MM) 16 GAUGE NAILS HAVING A 3/16" (15MM) HEAD OR 1/2" LONG (22MM) 16 GAUGE STAPLES SPACED IN ACCORDANCE WITH ASTM C263 OR C1181, OR AS OTHERWISE APPROVED.

CONCRETE CURING AND TESTING

CURING: PROTECT CONCRETE FOR 7 DAYS AGAINST MOISTURE LOSS, RAPID TEMPERATURE CHANGE, MECHANICAL INJURY AND INJURY FROM RAIN OR FLOWING WATER. MAINTAIN CONCRETE IN MOIST CONDITION AT TEMPERATURE ABOVE 50 DEGREES F, THROUGHOUT SPECIFIED CURING PERIOD. PROTECT FROM RAPID TEMPERATURE CHANGE AND RAPID DRYING FOR FIRST 24 HOURS FOLLOWING REMOVAL OF TEMPERATURE PROTECTION. START CURING ACTIVITIES AS SOON AS FREE WATER HAS DISAPPEARED FROM SURFACES OF CONCRETE AFTER PLACING AND FINISHING.

TESTING: CONCRETE TESTING FOR THIS PROJECT SHALL BE PAID FOR BY OWNER, AND SHALL CONSIST OF COMPRESSIVE TESTS MADE BY THE LABORATORY IN ACCORDANCE WITH ASTM C-31. FOLLOW ASTM C31 AND MAKE A SET OF SIX (6) STANDARD CYLINDERS FOR EACH 100 CU. YDS. OR FOR EACH DAYS POUR EXCEEDING 5 CU. YDS. TEST PER ASTM C39 AS FOLLOWS: TWO (2) SPECIMENS TESTED AT SEVEN (7) DAYS, ONE (1) AT 14 DAYS, TWO (2) TESTED AT 28 DAYS, AND ONE (1) HELD IN RESERVE. SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C-143 FOR EACH DAYS POUR, FOR EACH LOAD, OR AS DIRECTED BY ARCHITECT/ENGINEER.

REINFORCING STEEL

REINFORCING STEEL SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615-GRADE 60, EXCEPT THAT NEW BILLET STEEL CONFORMING TO ASTM A615-GRADE 40 MAY BE USED FOR COLUMN TIES AND BEAMS STIRRUPS. ALL DETAILING AND ACCESSORIES SHALL CONFORM TO TYPICAL DETAILS SHOWN IN THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI 315, LATEST EDITION".

ALL CONTINUOUS VERTICAL OR HORIZONTAL BARS IN FOOTINGS, FOUNDATIONS WALLS, SLABS AND OTHER CONCRETE SHALL BE LAP-SPLICED, WHERE NECESSARY OR DESIRABLE, BY WIRING TOGETHER IN CONTACT. LENGTH OF ALL #5 LAPS SHALL BE 40-BAR DIAMETERS OR 2'-1" MINIMUM, WHICHEVER IS GREATER (EXCEPT AS NOTED BY DRAWINGS). ALL BARS AT END OF CONTINUOUS FOOTINGS OR BEAMS SHALL BE CONT. TO FAR SIDES OF INTERSECTING ELEMENTS.

ALL SLABS ON GRADE SHALL BE 4" THICK AND REINFORCED WITH 6 X 6 - W/4 X W/4 W.W.F. UNLESS OTHERWISE NOTED. LAP FABRIC @ AT EDGES AND ENDS AND PROVIDE ADDITIONAL REINFORCING WHERE SHOWN ON DRAWINGS. PLACE MESH IN CENTER OF SLAB. MOISTURE BARRIER BENEATH FLOOR SLABS SHALL BE 6 MIL POLYETHYLENE. USE FLAT SHEETS OF WELDED WIRE FABRIC. ROLLS WILL NOT BE PERMITTED.

FOUNDATIONS

GEOTECHNICAL ENGINEERING EVALUATION AND SUBSURFACE EXPLORATION SHALL PERFORM BY OWNER'S GEOTECHNICAL CONSULTANT.

MAXIMUM ALLOWABLE SOIL PRESSURE IS ASSUMED TO BE 2000 POUNDS PER SQUARE FOOT.
SPREAD FOOTINGS SHALL BEAR ON SOIL COMPACTED TO A DENSITY OF AT LEAST 95% OF MODIFIED PROCTOR MAXIMUM DENSITY (A.S.T.M. D1557), FOR ALL REQUIRED FILL AND FOR AT LEAST 1'-0" BELOW FINISHED FLOOR UNLESS MORE STRINGENT REQUIREMENTS ARE RECOMMENDED BY OWNERS GEOTECHNICAL CONSULTANT.

GENERAL STRUCTURAL NOTES

CAST IN PLACE REINFORCED CONCRETE

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI (SLABS) 3000 PSI (COLUMNS AND BEAMS), A SLUMP OF 5" PLUS OR MINUS 1", AND HAVE 2 TO 5% AIR ENTRAINMENT, AND A MAXIMUM WATER/CEMENT RATIO OF 0.63
- HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS.
- HORIZONTAL FOOTING BARS SHALL BE BENT 20° AROUND CORNERS OR CORNER BARS WITH A 25° LAP PROVIDED EA WAY.
- CONCRETE COVER MIN. 3" WHEN EXPOSED TO EARTH OR 1 1/2" TO FORM U.O.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064/A1064M. W.W.F. SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 6". POLYPROPYLENE FIBERS FOR SLABS ON GRADE TO BE MIN 1.5 LBS OF FIBER PER CUBIC YARD
- ALL REINFORCING STEEL / STIRRUPS AND TIES SHALL BE NEW DOMESTIC DEFORMED BARS FREE FROM RUST, SCALE & OIL & SHALL MEET ASTM A615/A615M GRADE 40 U.O. REINFORCING FOR FOOTING SHALL BE SUPPORTED ON PRE-CAST CONCRETE PADS. STEEL WIRE OR PLASTIC SUPPORT. TOP REINFORCING SHALL BE POSITIVELY SUPPORTED BY TEMPORARY STRINGERS. DOWELS FOR COLUMNS & FILLED CELLS SHALL BE SECURED IN PLACE BY USING ADDITIONAL CROSS REINFORCING TIED TO FOOTING REINFORCING. SPLICES IN REINFORCING WHERE PERMITTED SHALL BE AS PER DETAIL MS05L1.
- HIGH STRENGTH SIMPSON SET EPOXY-TIE WAS USED IN THE DESIGN OF THIS PRODUCT. IF CONTRACTORS WISH TO USE A DIFFERENT EPOXY, THEY MUST FIRST CONTACT THE ENGINEER OF RECORD FOR WRITTEN APPROVAL.
- WHERE PROJECT IS TO BE LOCATED IN KNOWN RADON GAS PREVALENT AREAS, APPENDIX "I" OF THE FLORIDA BUILDING CODE 7TH EDITION, 2020 IS TO BE IMPLEMENTED. F303.4 CONCRETE STRENGTH IN THESE AREAS ARE TO BE A MINIMUM OF 3000 P.S.I. THEREFORE, ANY AND ALL NOTES ON THESE PLANS THAT INDICATE 2500 P.S.I. SHALL BE REPLACED WITH 3000 P.S.I. FOR THE CONCRETE STRENGTH.

MASONRY

- HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 2, CONFORMING TO ASTM C90-014, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 1900 PSI (F_m = 1500 PSI)
- MORTAR SHALL BE TYPE "S", CONFORMING TO ASTM C270-12A
- COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI SLUMP OF 7" TO 11" CONTAINING 5% AIR ENTRAINMENT DURING CONSTRUCTION. THE MEMBERS OF THE MASONRY SHALL BE AS NOTED ON THE DRAWINGS WITH THE CELLS FILLED WITH COARSE GROUT.
- GRADE 40 U.O. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM AND AT A MAXIMUM SPACING OF 192 DIA OR 10FT WHICH EVER IS LESS. REINFORCING SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL WITH MIN 1/2" CLEARANCE TO INSIDE FACE.
- REINFORCING STEEL SHALL BE LAPPED PER DETAIL MS05L1, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- GROUT STOPS SHALL BE PROVIDED BELOW BOND BEAM. PLASTIC SCREEN, METAL LATH STRIP OR CAVITY CAPS MAY BE USED TO PREVENT THE FLOW OF GROUT INTO CELLS BELOW. THE USE OF FELT PAPER AS A STOP IS PROHIBITED.
- TEMPORARY BRACING AND SHORING OF WALL TO PROVIDE STABILITY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- TYPICAL FILLED CELL REINFORCING SIZE AND SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS
- DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS AND NO CONCENTRATED LOADS FOR (7) DAYS. PER CODE ACI 318-14
- CONSOLIDATE POURS EXCEEDING 12' IN HEIGHT BY MECHANICAL VIBRATION, AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED. GROUT SHALL BE FLUSH WITH TOP OF WALL.

WOOD

- ALL EXTERIOR WOOD STUDS WALLS, BEARING WALLS, SHEAR WALLS, AND MISC. STRUCTURAL WOOD FRAMING MEMBERS (I.E. BLOCKING OR CABLE END BRACING) SHALL BE EITHER AS SPECIFIED IN PLAN OR IN DETAILS. IF CONFLICTS OCCUR BETWEEN PLAN AND DETAILS, THE STRONGEST MATERIAL SHALL BE USED. AT A MINIMUM, ALL WOOD STRUCTURAL FRAMING MEMBERS SHALL BE SPF #2.
- ALL LUMBER SPECIFIED ON DRAWINGS ARE INTENDED FOR DRY USE ONLY (MOISTURE CONTENT 19% OR LESS). U.O. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIA. SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIA. FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HISS2 STUD SHOES. TYP. U.O.
- MANY OF THE NEW PRESURES TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND TO SELECT APPROPRIATE CONNECTORS THAT RESIST CORROSION. FOR EXAMPLE, ACC-C, ACC-D, CBA-A OR CBA-R REQUIRE HOT-DIPPED GALVANIZED OR STAINLESS STEEL FASTENERS. DOT SODIUM BORATE (SBX) DOES NOT.
- ALL EXPOSED WOOD OR WOOD IN CONTACT WITH EARTH OR CONCRETE TO BE PRESURE TREATED.
- UNTREATED WOOD SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE OR MASONRY. SEAT PLATES SHALL BE PROVIDED AT BEARING LOCATIONS WITHOUT WOODEN TOP PLATES.
- SEE PLAN FOR STUD PACK AND BEAM NAILING PATTERNS.
- ALL ENGINEERED LUMBER TO HAVE THE FOLLOWING MIN VALUES U.O.
PARALLAM COLUMNS: 1.8E Fb = 2400 PSI
MICROLAM (LVL) BEAMS: 2.0E Fb = 2800 PSI
LULUM BEAMS: SHSP 24E FLX LVP (1.7E FB=2400 PSI) MIN.
- SEE PLAN NOTE FOR ADDITIONAL ROOF, WALL, SHEAR WALL AND FLOOR SHEATHING REQUIREMENTS ALONG W/ NAILING INFORMATION OTHERWISE:
9.1. ROOF DECK: PLYWOOD C-C-D, EXTERIOR OR OSB
9.2. FLOOR SHEATHING: TAG C-C GROUP 1, APA RATED (4824) SHEATHING SHALL FINISH FLUSH TO EXTERIOR WALL FACE.
9.3. WALL SHEATHING: 7/16" STRUCTURAL I OSB EXPOSURE 1, OR 1/2" RATED OSB EXPOSURE 1. A MINIMUM 8" SPACE IS RECOMMENDED BETWEEN PANELS AT EDGE AND END JOINTS TO ALLOW FOR EXPANSION. PER R604.3 SHEATHING SHALL NOT BE USED AS WEATHER RESISTANCE BARRIER UNLESS SPECIFIED.

UPLIFT CONNECTORS

- UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT OR LATERAL FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBERS OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE COORDINATE WITH THE TRUSS ENGINEER FOR THE LOCATION OF THESE WALLS AND STRUCTURAL PLANS FOR MORE INFO.

STRUCTURAL STEEL

- MATERIAL SPECIFICATIONS: WIDE FLANGE SECTIONS: ASTM A992, GRADE 50, F_y=50 KSI TUBE STEEL (HSS): ASTM A500, GRADE B, F_y= 46 KSI PIPE STEEL: ASTM A53, TYPE B, GRADE S, F_y= 35 KSI STEEL: A36 STEEL: A36 STEEL: A36 STEEL STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325 U.O.
- STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL.
- STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325 U.O. ALL A325N BOLTS SHALL BE BROUGHT TO A "SNUG-TIGHT" CONDITION, AS DEFINED IN THE SPECIFICATION. SLIP CRITICAL (SC) BOLTS MUST BE FULLY TENSIONED PER SPECIFICATION STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL. WELDED CONNECTIONS: ELECTRODES - E70XX UNO (LOW HYDROGEN). FILLET WELDS SHALL BE 3/8" UNO.
- SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOAD, AND TO CLEARANCES.
- STRUCTURAL STEEL SHALL RECEIVE SHOP COAT OF PRIMER (COLOR AS DIRECTED BY ARCHITECT) EXCEPT FOR AREAS WHICH WILL RECEIVE SPRAY-ON FIRE PROTECTION.
- A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

PRE ENGINEERED WOOD TRUSSES

- ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS PER STRUCTURAL PLAN
- PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR TRUSS-GRADE LUMBER AND ITS FASTENERS" AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- TRUSS MEMBERS AND CONNECTIONS SHALL BE PROPORTIONED WITH A MAXIMUM ALLOWABLE STRESS INCREASE FOR LOAD DURATION OF 25% TO WITHSTAND THE LIVE LOADS GIVEN IN THE NOTES AND TOTAL DEAD LOAD.
- BRIDGING FOR PRE-ENGINEERED WOOD TRUSSES SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER UNLESS NOTED ON THE PLANS.
- TRUSS ELEVATIONS AND SECTIONS ARE FOR GENERAL CONFIGURATION OF TRUSSES ONLY. WEB MEMBERS ARE NOT SHOWN, BUT SHALL BE DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE FRAMING DESIGN LOADS.
- DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
- PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH SPECIFIED LOADS AND GOVERNING CODES. SUBMITTALS SHALL INCLUDE TRUSS FRAMING PLANS AND DETAILS SHOWING MEMBER SIZES, BRACING, ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS, AND PERMANENT BRACING AND/OR BRIDGING AS REQUIRED FOR ERECTION AND FOR THE PERMANENT STRUCTURE. EACH SUBMITTAL SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER. SUBMIT 3 COPIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- THE TRUSS MANUFACTURER SHALL DETERMINE ALL SPANS WORKING POINTS, BEARING POINTS, AND SIMILAR CONDITIONS. TRUSS SHOP DRAWINGS SHALL SHOW ALL TRUSSES, ALL BRACING MEMBERS, AND ALL TRUSS TO TRUSS HANGERS.

FIELD REPAIR NOTES

- MISSED "R" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED WITH 1/2" DIA. EPOXY ANCHORS WITH 7" EMBEDMENT. SIMPSON "SET" EPOXY ADHESIVE BINDER FOLLOWING ALL MANUFACTURER'S RECOMMENDATIONS OR SIMPSON 1/2" TITEN HD BOLTS WITH MINIMUM 7" EMBEDMENT. SEE PLAN FOR EMBEDMENT DEPTH AT FLOOR STEPS.
- FOR MISSED VERT. DOWELS, DRILL A 3/4" DIAMETER HOLE 6" DEEP AT THE LOCATION OF THE OMITTED REBAR AND INSTALL A 3/4" LONG #5 BAR INTO THE EPOXY FILLED HOLE. USE A TWO PART EMBEDMENT EPOXY (SIMPSON HIGH STRENGTH EPOXY-TIE ANCHORING ADHESIVE) MIXED PER THE MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO THE MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
- FOR MORTAR JOINTS LESS THAN 1/4", PROVIDE (1) #5 VERT. IN CONC. FILLED CELL EACH SIDE OF THE JOINT (BAR DOES NOT HAVE TO BE CONT. TO FOOTING).
- MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED WITH (1) SIMPSON MSTM16 W/ STRAP W/ (4) 1/2" X 2" TITEN HD BOLTS TO MASONRY AND (7)-10d NAILS TO TRUSS FOR UPLIFTS LESS THAN 860 LBS (USE (2) MSTM16 FOR UPLIFTS LESS THAN 1720#). IF CORNER STRAP IS MISSED, CONTRACTOR IS TO INSTALL (2) SIMPSON HGAM10 W/ (4) 1/4" X 1/2" SDS SCREWS AND (5) 1/4" X 1/2" TITEN ONE EACH SIDE OF TRUSS.
- NO MORE THAN 10 STRIPS MAY BE SUBSTITUTED OR NO MORE THAN 3 IN A ROW WITHOUT APPROVAL FROM EOR. IF GIRDER TRUSS CONNECTIONS ARE MISSED, CONTACT THE EOR FOR SUBSTITUTION.
- IF MISSED, MSTM36 OR MSTM40 STRAP IS MISSED FOR 2ND FLOOR JAMB STUD CONNECTION, CONTRACTOR MAY INSTALL SIMPSON HTTS W/ (26) 16d X 2 1/2" NAILS AND 5/8" ANCHOR BOLT SET IN SIMPSON HIGH STRENGTH EPOXY W/ MIN 6" EMBEDMENT AND MIN 3" EDGE DISTANCE. CONTACT EOR IF STRAPS ARE MISSED UNDER GIRDER JAMB STUD LOCATIONS.

STRUCTURAL DESIGN CRITERIA

CODE CRITERIA

- FLORIDA BUILDING CODE 7TH EDITION (2020) RESIDENTIAL.
- FLORIDA FIRE PREVENTION CODE 7TH EDITION (2020)
- FLORIDA BUILDING CODE ACCESSIBILITY 7TH EDITION (2020)
- NFPA 70-14, NATIONAL ELECTRICAL CODES, (NEC 2017) & 6TH FBCR CH. 34-43.
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - (ACI 318-14).
- SPECIFICATIONS FOR STRUCTURAL CONCRETE - (ACI 301-10).
- BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - (ACI 530-13).
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - 2015 EDITION.
- WOOD FRAMED CONSTRUCTION MANUAL 2015 EDITION.
- APA PLYWOOD DESIGN SPECIFICATION 2012 EDITION.
- AMERICAN SOCIETY OF CIVIL ENGINEERS: ASCES/SEI 7-16
- ULTIMATE DESIGN MANUAL - 2015 EDITION

GENERAL ROOF LOADING

	SHINGLE ROOF (PSF)	METAL ROOF (PSF)	TILE ROOF (PSF)	HEAVY ROOF (PSF)
TOP CHORD LL	20	20	20	20
TOP CHORD DL	10	10	15	25
BOTTOM CHORD LL*	0	0	0	0
BOTTOM CHORD DL	10	10	10	10
TOTAL (PSF)	40	40	45	55

- BOTTOM CHORD LL (OPT)
ATTICS W/ LIMITED STORAGE 20
ATTICS W/ HEAVY STORAGE 50
* ATTICS W/ NO STORAGE (NON-CONCURRENT)

NOTE: LL REDUCTIONS ARE ALLOWED PER CODE BUT ONLY WITH WRITTEN APPROVAL FROM EOR OR INDICATED ON PLAN

GENERAL FLOOR LOADING

	TOP CHORD LL	TOP CHORD DL
	40 (PSF)	10 (PSF)
BOTTOM CHORD LL	0 (PSF)	0 (PSF)
BOTTOM CHORD DL	5 (PSF)	5 (PSF)

SPECIAL FLOOR LOADING

	60 (PSF)	40 (PSF)	100 (PSF)	125 (PSF)	200(LBS/0)	50 (LBS/0)	40 (PSF)	30 (PSF)	150 (PSF)
GAME ROOM / READING ROOMS	60 (PSF)	40 (PSF)	100 (PSF)	125 (PSF)	200(LBS/0)	50 (LBS/0)	40 (PSF)	30 (PSF)	150 (PSF)
BALCONIES/ DECKS	60 (PSF)	40 (PSF)	100 (PSF)	125 (PSF)	200(LBS/0)	50 (LBS/0)	40 (PSF)	30 (PSF)	150 (PSF)
BALCONIES OVER 100 SQ.FT.	60 (PSF)	40 (PSF)	100 (PSF)	125 (PSF)	200(LBS/0)	50 (LBS/0)	40 (PSF)	30 (PSF)	150 (PSF)
LIBRARIES - STACK ROOMS	60 (PSF)	40 (PSF)	100 (PSF)	125 (PSF)	200(LBS/0)	50 (LBS/0)	40 (PSF)	30 (PSF)	150 (PSF)

DEFLECTION CRITERIA

	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240
ROOF TRUSSES*	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240
ROOF RAFTERS (W/O CLG.)	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240
FLOOR TRUSSES/ BEAMS **	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240
FLOOR JOIST***	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240	LL/960	TL/240

*TL MAX 7/16" UP TO 40FT SPAN
**TL MAX 3/4"
***TL MAX 1/2"
****TL MAX 1/4" DIFFERENTIAL BETWEEN ADJACENT TRUSSES

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10	FOOTING DETAILS												
11	LINTEL LOADING TABLES AND CONCRETE DETAILS												
12	CONNECTOR SCHEDULE AND ENGINEERING DETAILS												
13	HEADER SCHEDULE AND ENGINEERING DETAILS												

WIND LOADING CRITERIA ASCE 7-16

WIND SPEED (ULTIMATE)	140.0 MPH
WIND SPEED (ALLOWABLE)	108.0 MPH
EXPOSURE CATEGORY	C
BUILDING CATEGORY	II
BUILDING TYPE	V
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	+/- 0.18

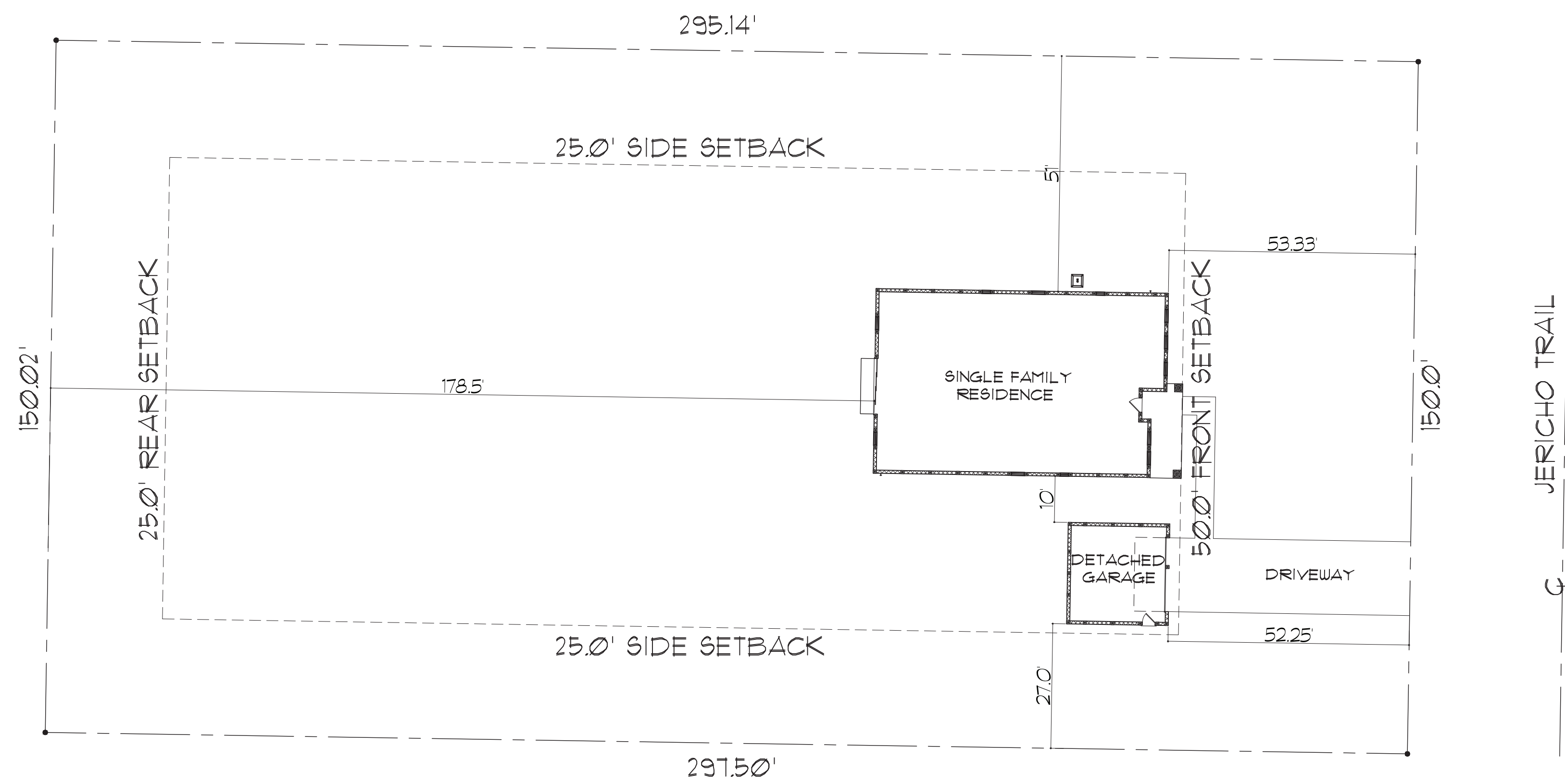
NOTE: MEAN ROOF HEIGHT FOR TYPICAL SINGLE STORY BUILDING IS 15FT, AND FOR 2 STORY IS 30 FEET

EFFECTIVE WIND AREA (SQ FEET)	WIND PRESSURE AND SUCTION (PSF)
AREA (a)	(+) 49.4 (-) 81.3
AREA (b)	(+) 53.5 (-) 82.0
AREA (c)	(+) 47.2 (-) 58.5
AREA (d)	(+) 51.4 (-) 76.4
AREA (e)	(+) 44.2 (-) 54.9
AREA (f)	(+) 48.4 (-) 89.1
AREA (g)	(+) 42.0 (-) 52.1
AREA (h)	(+) 46.2 (-) 83.7

9'-0" x 7'-0"	16'-0" x 7'-0"
(+) 31.1 (-) 35.0	(+) 29.8 (-) 33.1
(+) 35.6 (-) 47.0	(+) 35.6 (-) 47.0

AREA	(1)	(2)	(3)
10 - 19.99	(+) 20.0 (-) 78.7	(+) 20.0 (-) 45.2	(+) 20.0 (-) 103.7
20 - 49.99	(+) 18.8 (-) 73.5	(+) 18.8 (-) 45.2	(+) 18.8 (-) 118.1
50 - 99.99	(+) 17.2 (-) 66.6	(+) 17.2 (-) 45.2	(+) 17.2 (-) 88.2
> 100	(+) 16.0 (-) 61.46	(+) 16.0 (-) 45.2	(+) 16.0 (-) 97.0

AREA	(1)	(2)	(3)
10 - 19.99	(+) 20.0 (-) 78.7	(+) 20.0 (-) 45.2	(+) 20.0 (-) 103.7
20 - 49.99	(+) 18.8 (-) 73.5	(+) 18.8 (-) 45.2	(+) 18.8 (-) 118.1
50 - 99.99	(+) 17.2 (-) 66.6	(+) 17.2 (-) 45.2	(+) 17.2 (-) 88.2
> 100	(+) 16.0 (-) 61.46	(+) 16.0 (-) 45.2	(+) 16.0 (-) 97.0



LEGAL DESCRIPTION:
 LOT 3, BLOCK 23, ROYAL TRAILS-UNIT NO.1
 PLAT BOOK 19 PAGE 19, OF THE PUBLIC
 RECORDS OF LAKE COUNTY, FLORIDA

SITE PLAN
 SCALE: 1"=20.0'

REVISIONS	BY

RESIDENTIAL DESIGN
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 e-mail: ericmlucia@gmail.com
DESIGNS

Lucia

LP STRUCTURAL DESIGN, LLC
 223 MAGNOLIA CIRCLE CIRCLE
 EUSTIS, FLORIDA 32726
 352.989.1935
 PER: 47617

NEW HOME DESIGN
CASTILLO
 JERICHO TRAIL
 EUSTIS FLORIDA 32736

DATE:
 SCALE: NOTED
 DRAWN: EML
 JOB:
 SHEET
 OF 13 SHEETS

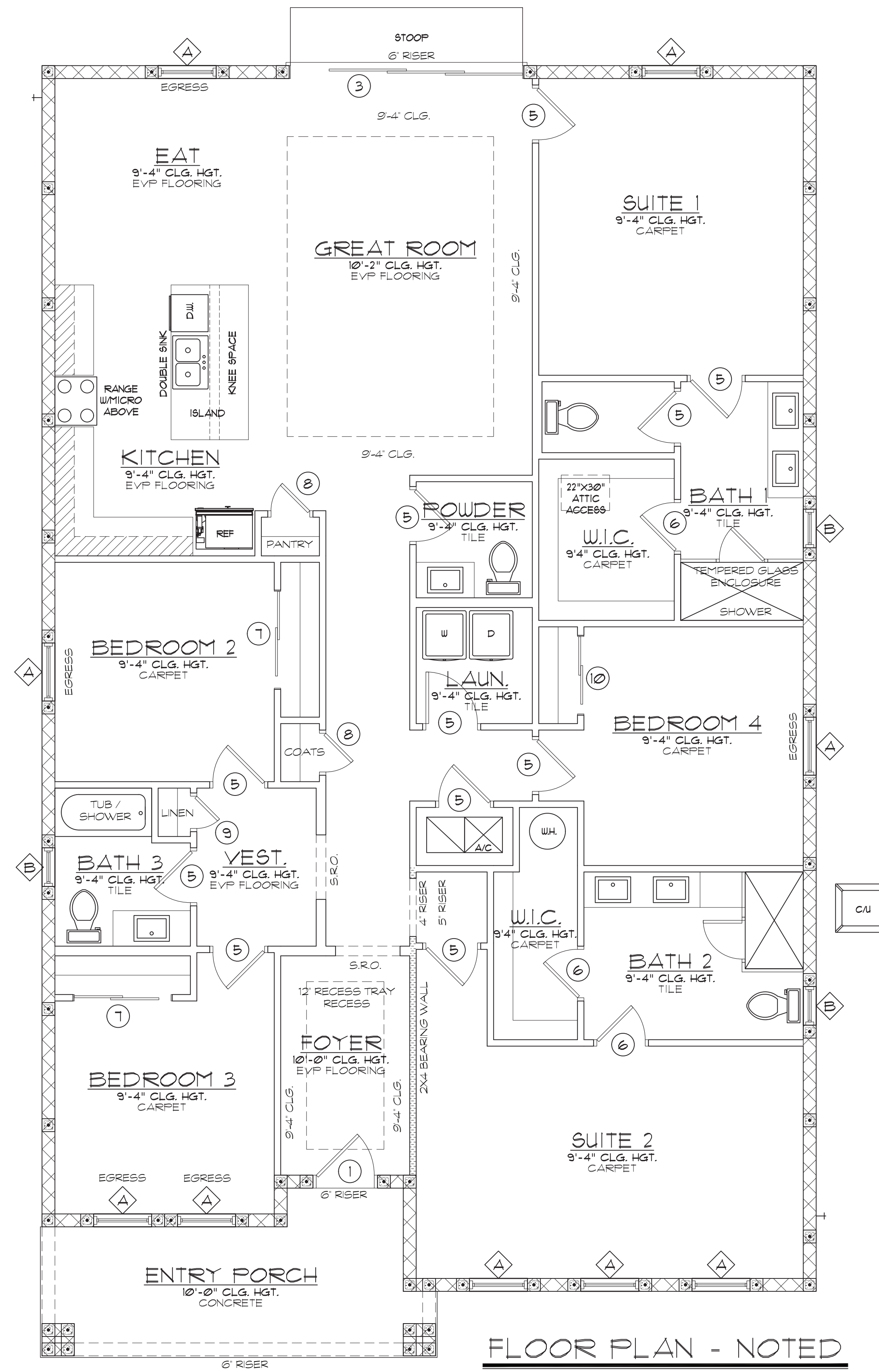
2

WINDOW SCHEDULE				
TAG	WIDTH	HGT.	QTY.	NOTES
△A	3'-0"	5'-0"	9	CASEMENT
△B	2'-0"	4'-0"	3	CASEMENT - TEMPERED

DOOR SCHEDULE				
EXTERIOR				
TAG	WIDTH	HGT.	QTY.	NOTES
①	3'-0"	8'-0"	2	FULL GLASS
②	16'-0"	8'-0"	1	OVERHEAD GARAGE DOOR
③	12'-0"	8'-0"	1	3-PANEL SLIDING GLASS
④	2'-8"	8'-0"	1	EXTERIOR GARAGE SWING

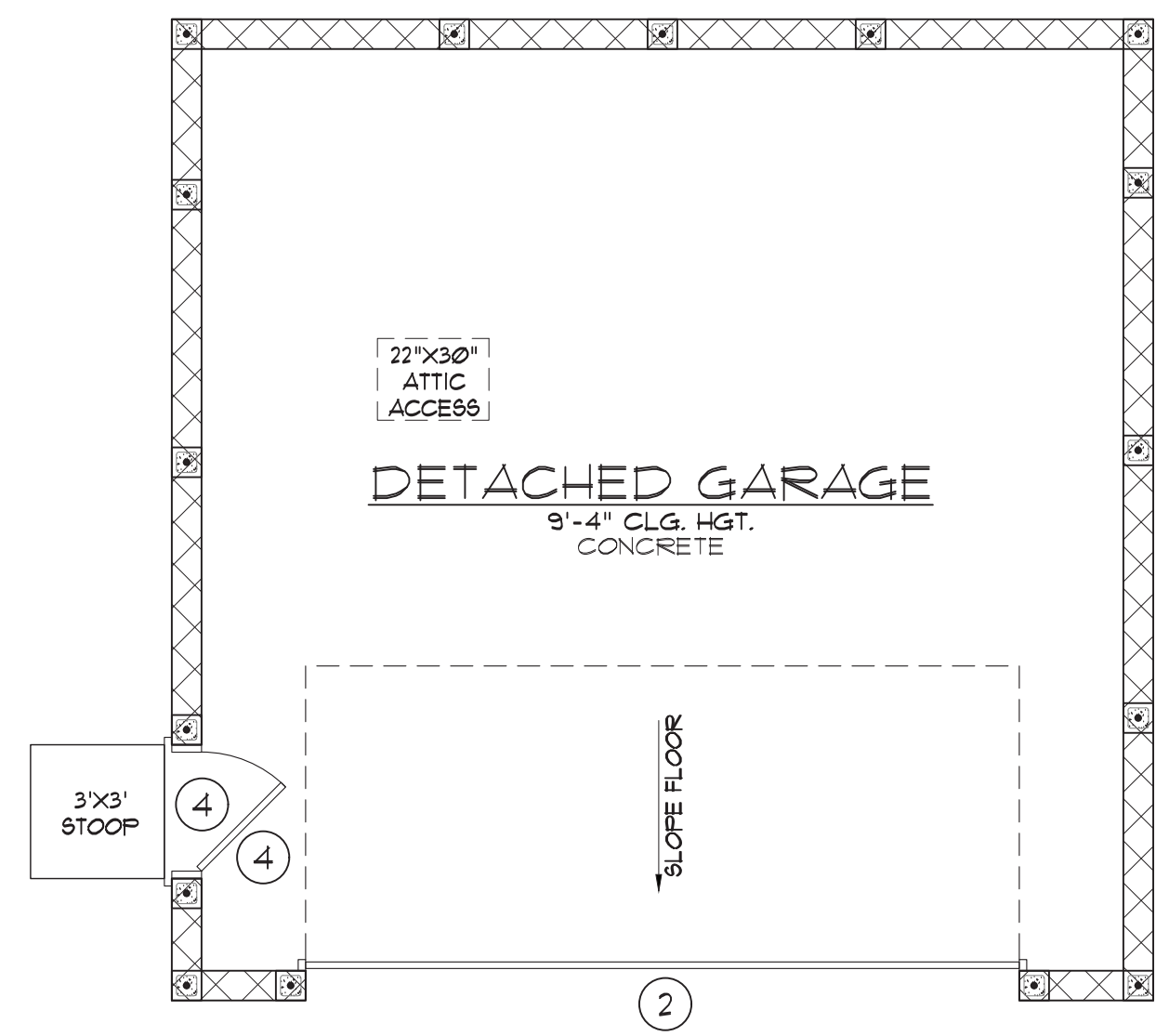
INTERIOR				
TAG	WIDTH	HGT.	QTY.	NOTES
⑤	2'-8"	8'-0"	11	SWING
⑥	2'-6"	8'-0"	3	SWING
⑦	5'-0"	8'-0"	2	BI-PASS
⑧	2'-0"	8'-0"	2	SWING
⑨	1'-8"	8'-0"	1	SWING
⑩	4'-0"	8'-0"	1	BI-PASS

ANALYSIS	
LIVING: FRONT PORCH:	2459 142
TOTAL UNDER ROOF:	2601



FLOOR PLAN - NOTED
SCALE: 1/4" = 1'-0"

ANALYSIS	
DETACHED GARAGE:	484



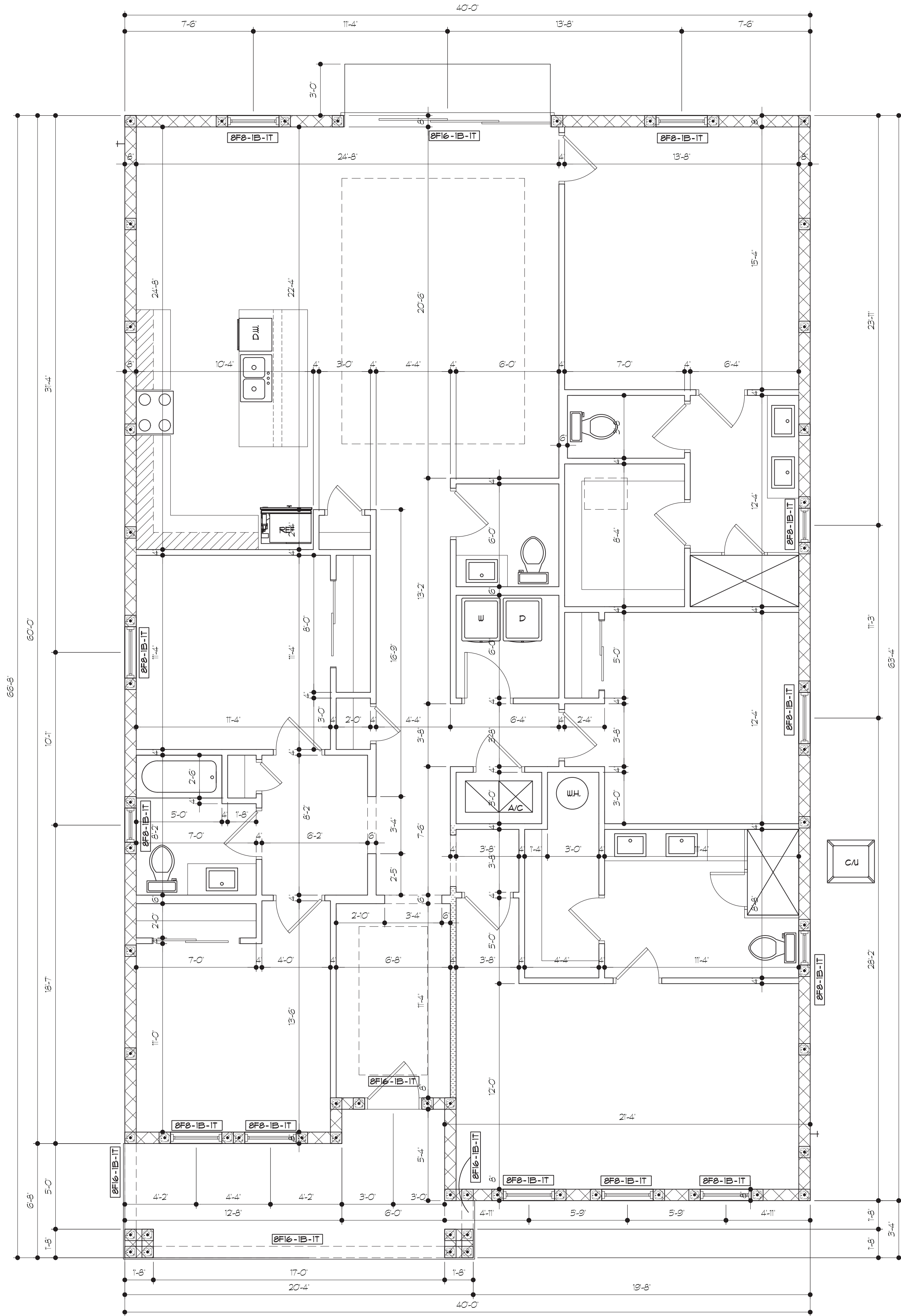
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FLOOR PLAN - DIMENSIONED AND LINTEL PLAN

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

NOTE:
CONTRACTOR SHALL VERIFY ALL
DIMENSIONS PRIOR TO ANY
CONSTRUCTION

UNLESS OTHERWISE NOTED
HEADERS SHALL BE DESIGNED
PER ATTACHED HEADER
SCHEDULE ON SHEET 12

FRAMING LEGEND

- ◻ CONNECTOR SCHEDULE TAG - SEE
DETAILS ON SHEET 12
- TYPICAL CONNECTION TAG - SEE
DETAILS ON SHEET 12

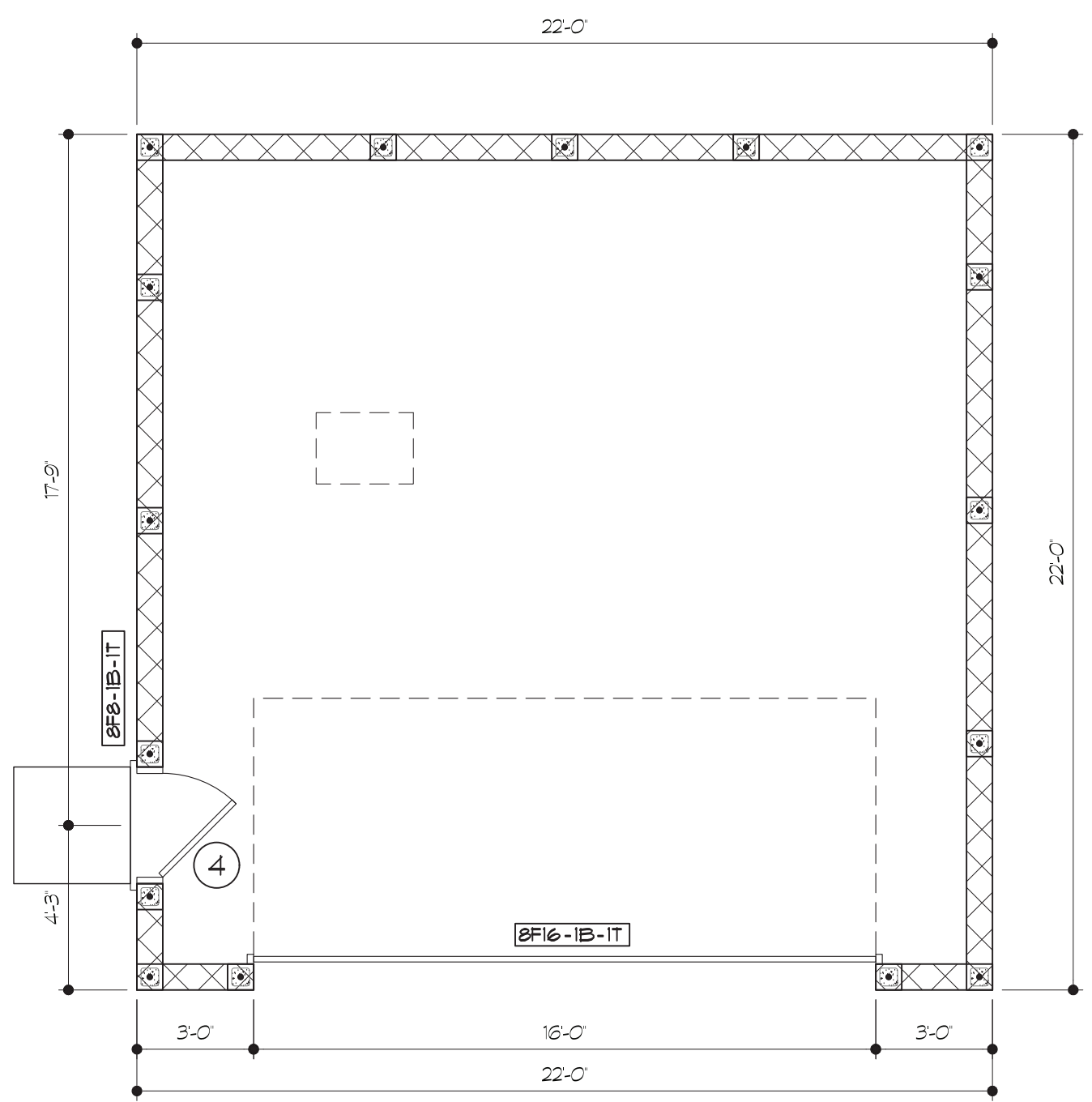
UNLESS OTHERWISE NOTED,
DIMENSIONS ARE TO OUTSIDE OF
SLAB
FOR ADDITIONAL DIMENSIONING
REFER TO ARCHITECTURAL SET OF
PLANS

ALL LINTEL SPANS SHALL BE VERIFIED
BY BUILDER PRIOR TO WALL
CONSTRUCTION

ALL LINTEL DEPTH SHOWN ON THIS PLAN IS THE MINIMUM
REQUIRED FOR ALL APPLICABLE LOADS, ALLOWING BUILDER
TO INCREASE DEPTH OF LINTEL TO FIT ANY APPLICATION.
FOR ALL THOSE CASES AND UNLESS OTHERWISE NOTED,
LINTELS SHALL BE 8" OR 12" WIDE BY APPLICABLE DEPTH.
UNLESS OTHERWISE SPECIFIED, FILL ALL COURSES WITH SOLID
3000 PSI CONCRETE AND 1 # ROD TOP AND BOTTOM.

PRECAST CONCRETE LINTEL PER
ATTACHED SCHEDULE ON SHEET 11

V.I.F. = VERIFY IN FIELD BY BUILDER
AND INFORM ENGINEER



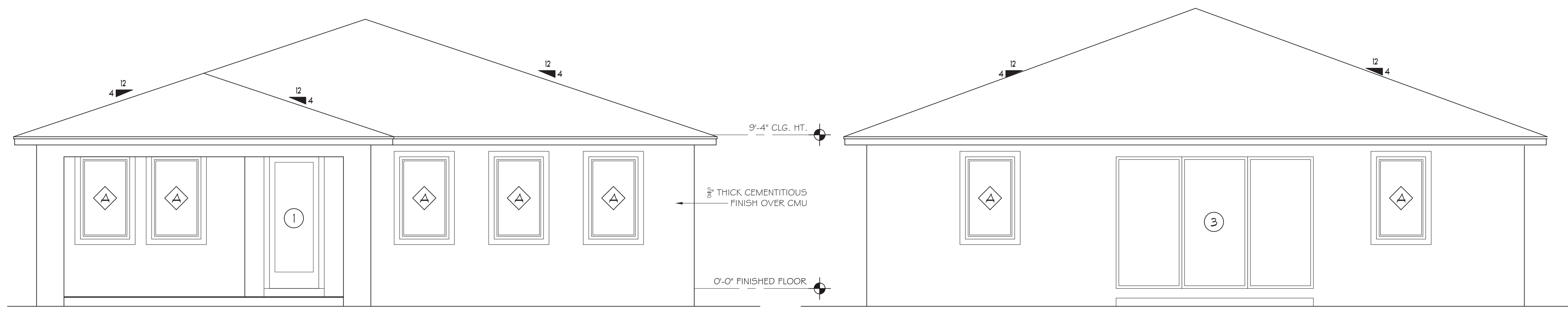
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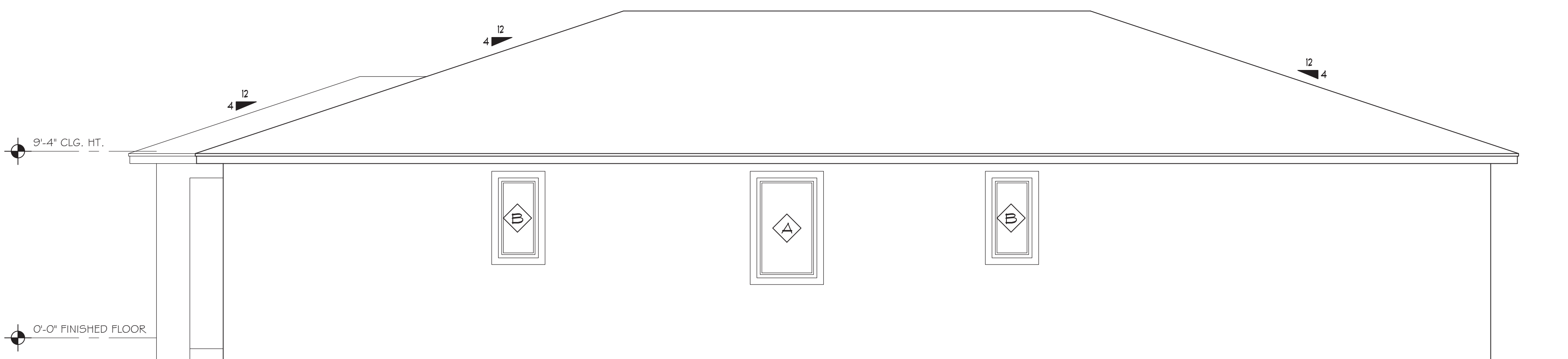


FRONT ELEVATION

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

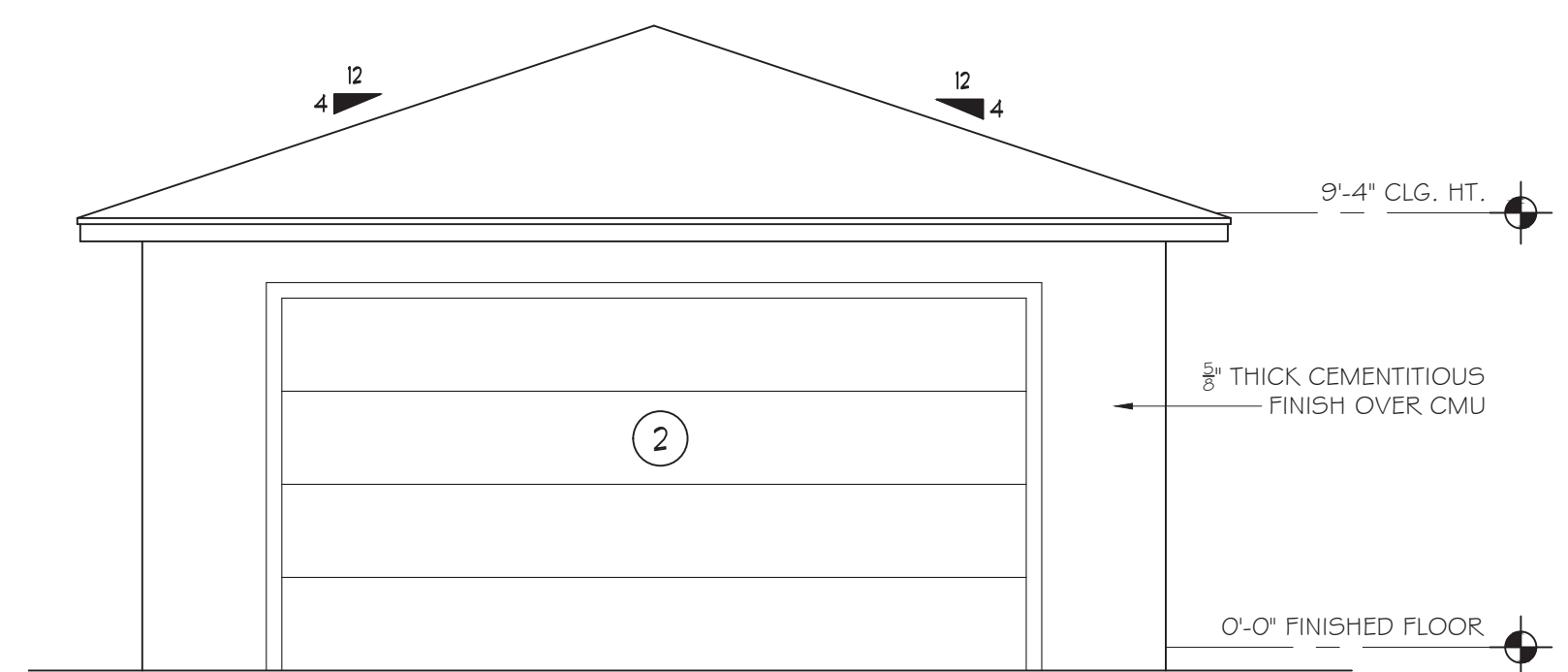
REAR ELEVATION

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



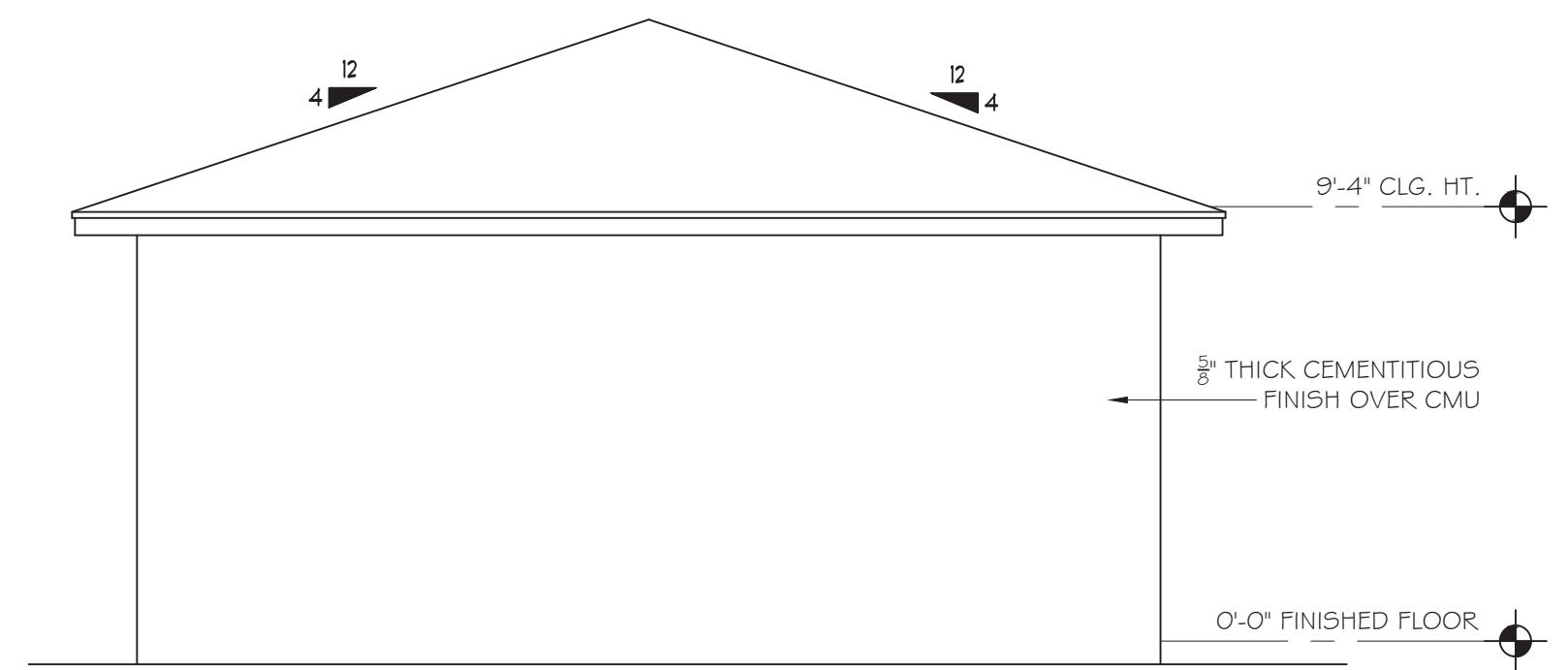
RIGHT ELEVATION

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



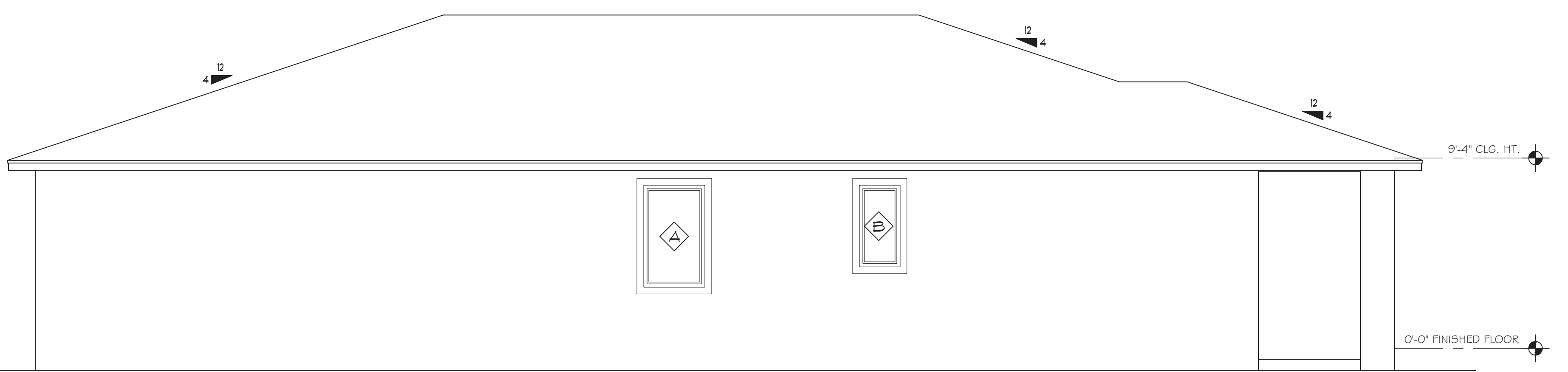
FRONT ELEVATION

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



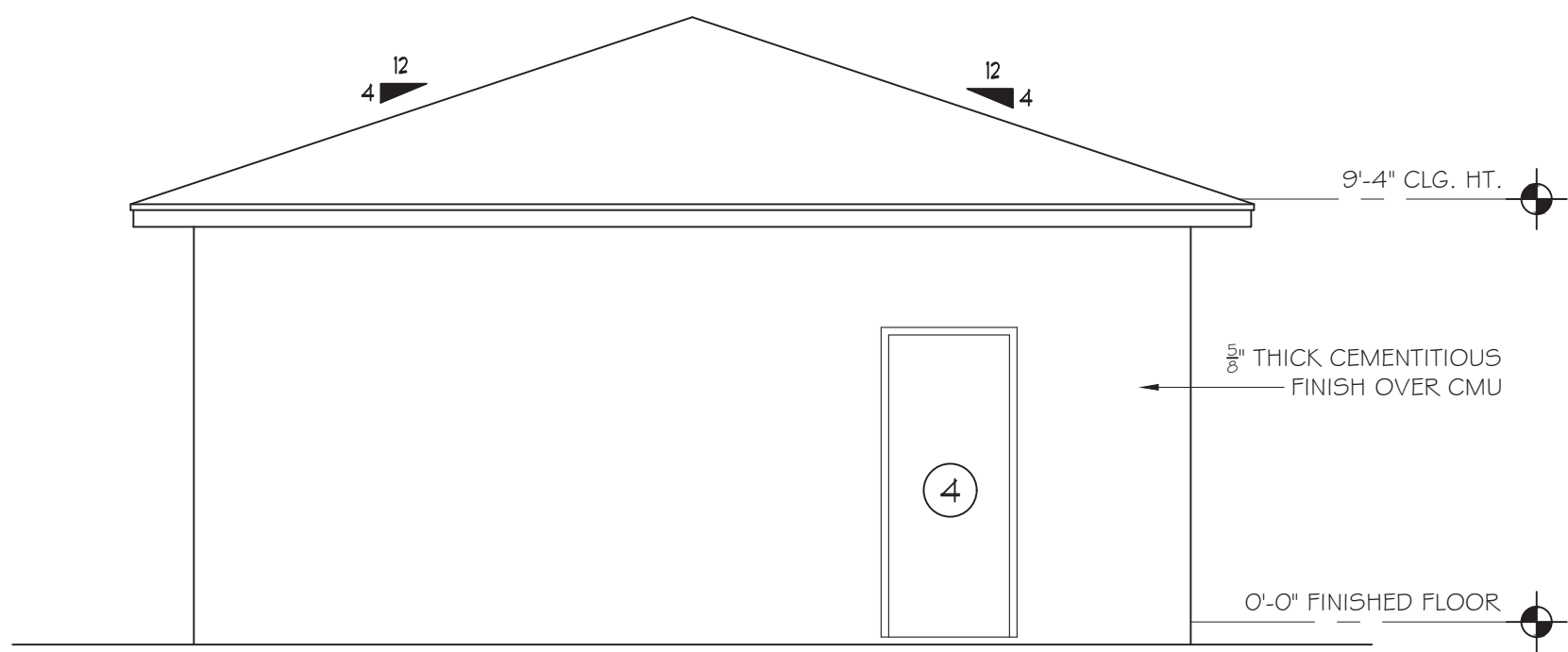
REAR ELEVATION

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



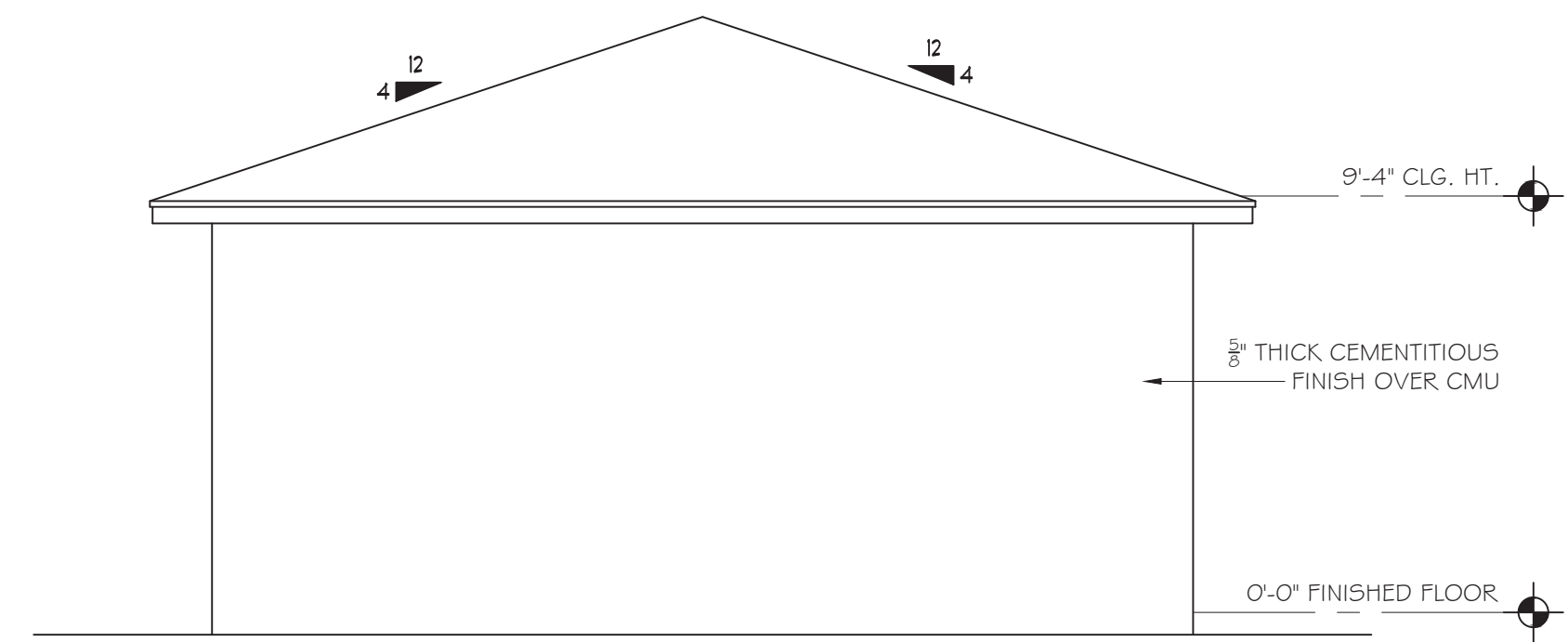
LEFT ELEVATION

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



LEFT ELEVATION

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



RIGHT ELEVATION

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

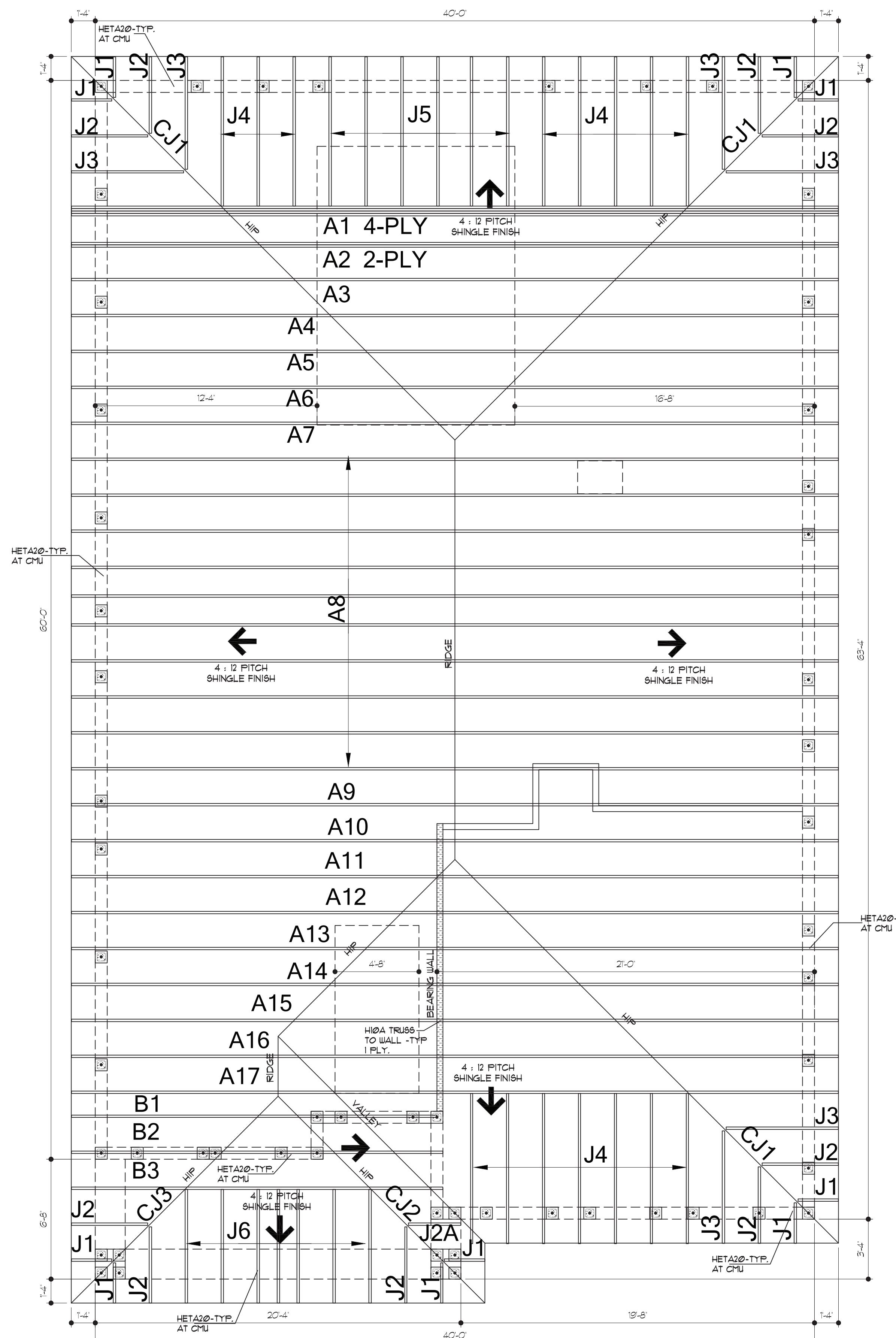
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ROOF TRUSS LAYOUT - HOUSE
SCALE: 1/4"=1'-0"

NOTE:
CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION

UNLESS OTHERWISE NOTED HEADERS SHALL BE DESIGNED PER ATTACHED HEADER SCHEDULE ON SHEET 12

FRAMING LEGEND

- CONNECTOR SCHEDULE TAG - SEE DETAILS ON SHEET 12
- TYPICAL CONNECTION TAG - SEE DETAILS ON SHEET 12

UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO OUTSIDE OF SLAB FOR ADDITIONAL DIMENSIONING REFER TO ARCHITECTURAL SET OF PLANS

V.I.F. = VERIFY IN FIELD BY BUILDER AND INFORM ENGINEER

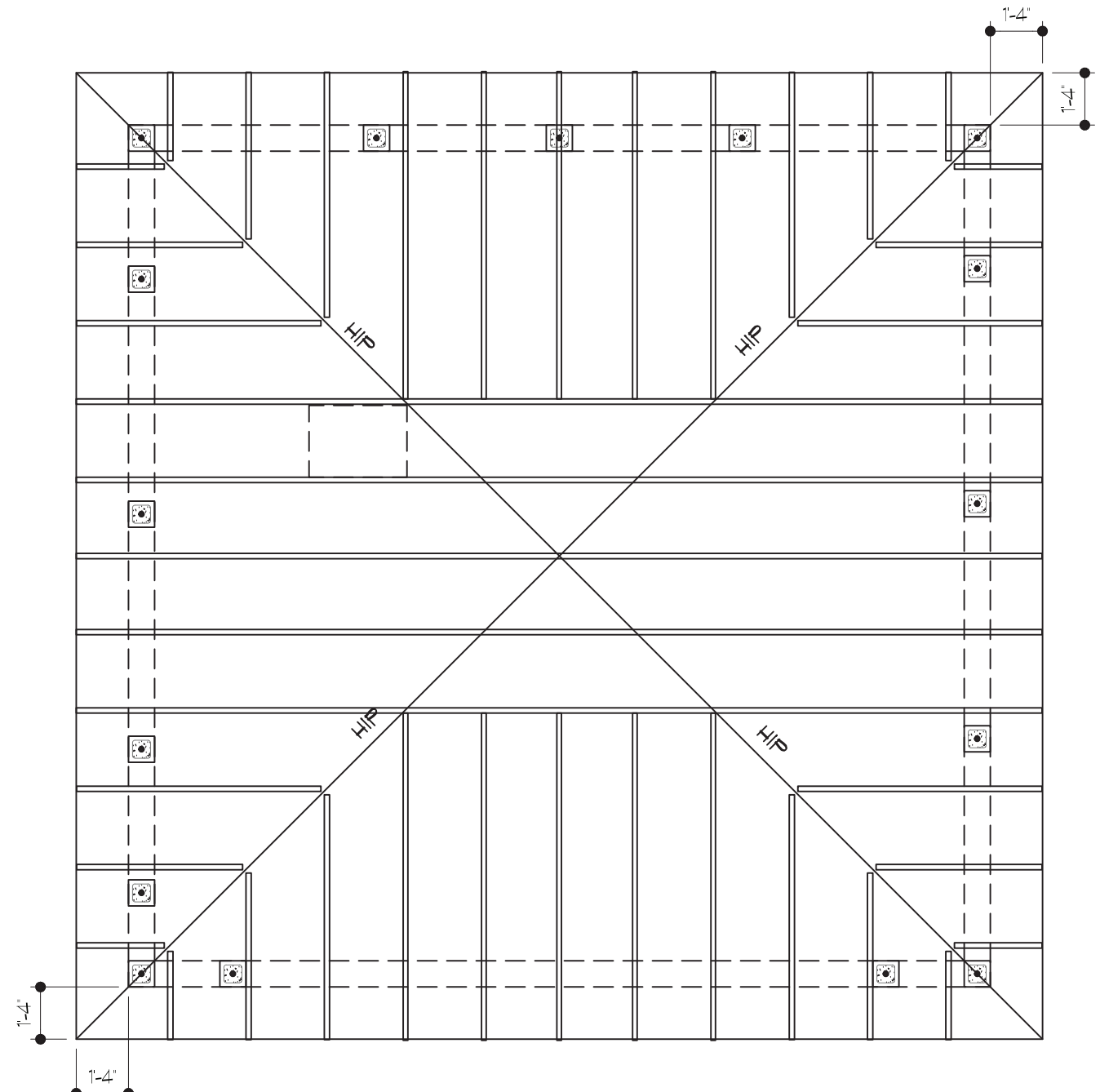
- 8"x8" SOLID GROUTED CELL (3,000 PSI) WITH (1) #5 VERTICAL REBAR FROM FOOTING UP TO TIE BEAM
- INTERIOR LOAD BEARING WALL AT 9'-4"

ATTIC VENTILATION - HOUSE
THE TOTAL NET-FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE ATTIC SPACE TO BE VENTILATED. THE TOTAL VENTILATION MAY BE REDUCED TO 1/300 PROVIDED AT LEAST 50% BUT NOT MORE THAN 80% OF THE REQUIRED VENTILATION BE LOCATED IN THE UPPER PORTION OF THE AREA TO BE VENTILATED, OR AT LEAST 3' ABOVE THE SOFFIT VENTILATION INTAKE.

256.1 SQUARE FEET OF TOTAL ATTIC / 150 =
17.1 SQUARE FEET OF NET-FREE VENTILATION REQUIRED

ATTIC VENTILATION - GARAGE
THE TOTAL NET-FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE ATTIC SPACE TO BE VENTILATED. THE TOTAL VENTILATION MAY BE REDUCED TO 1/300 PROVIDED AT LEAST 50% BUT NOT MORE THAN 80% OF THE REQUIRED VENTILATION BE LOCATED IN THE UPPER PORTION OF THE AREA TO BE VENTILATED, OR AT LEAST 3' ABOVE THE SOFFIT VENTILATION INTAKE.

484 SQUARE FEET OF TOTAL ATTIC / 150 =
3.3 SQUARE FEET OF NET-FREE VENTILATION REQUIRED



ROOF TRUSS LAYOUT - GARAGE

REVISIONS	BY

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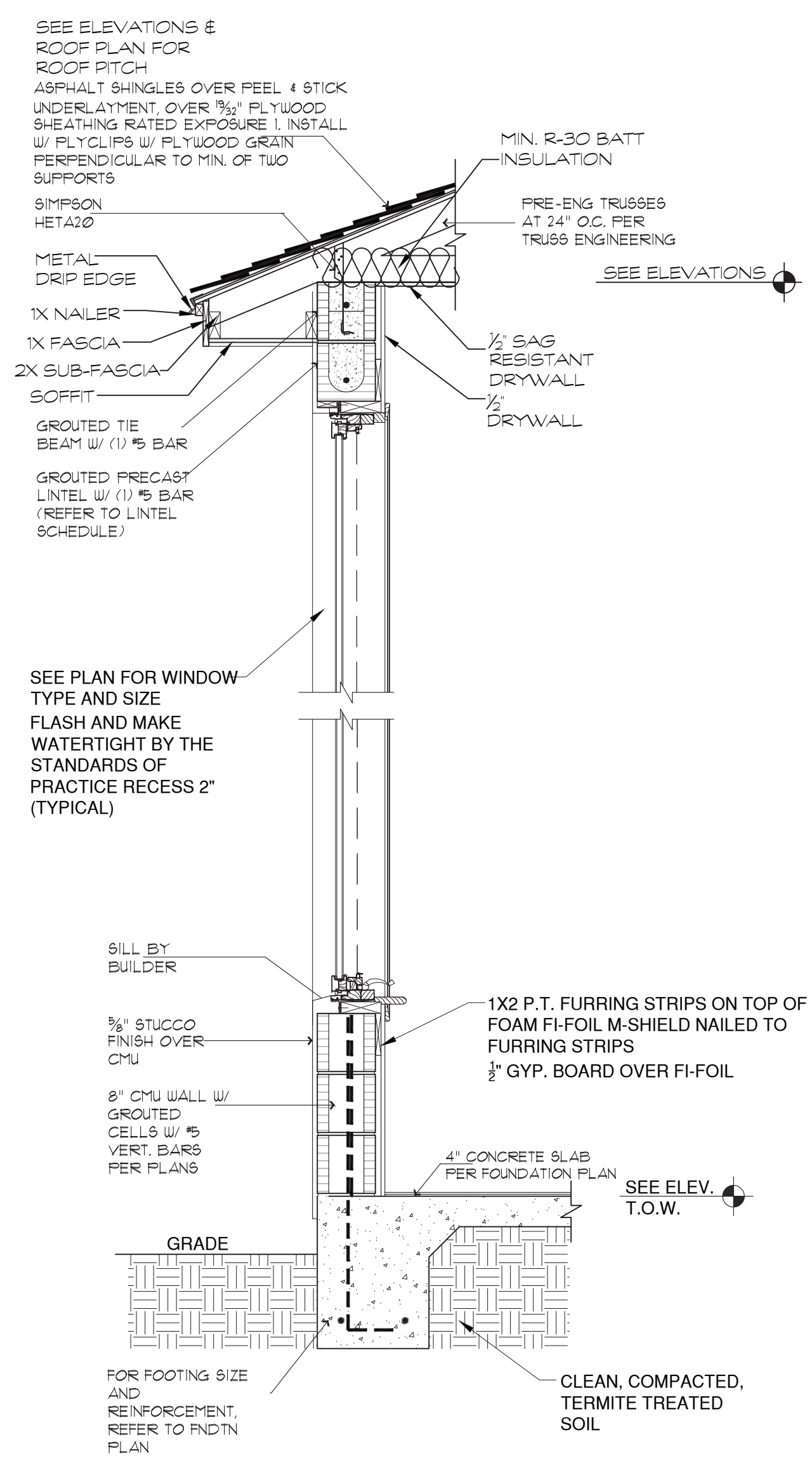
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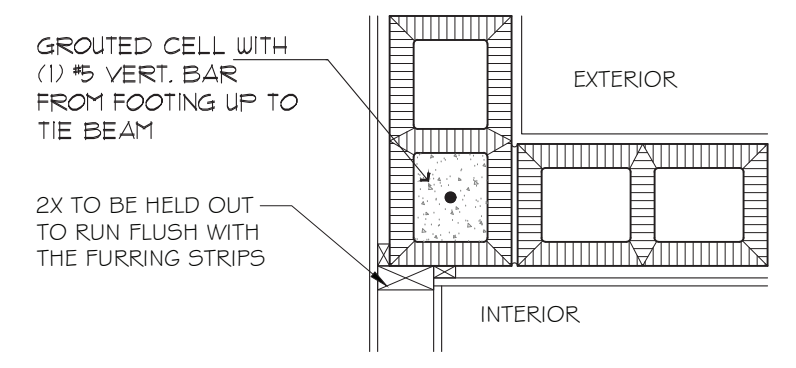
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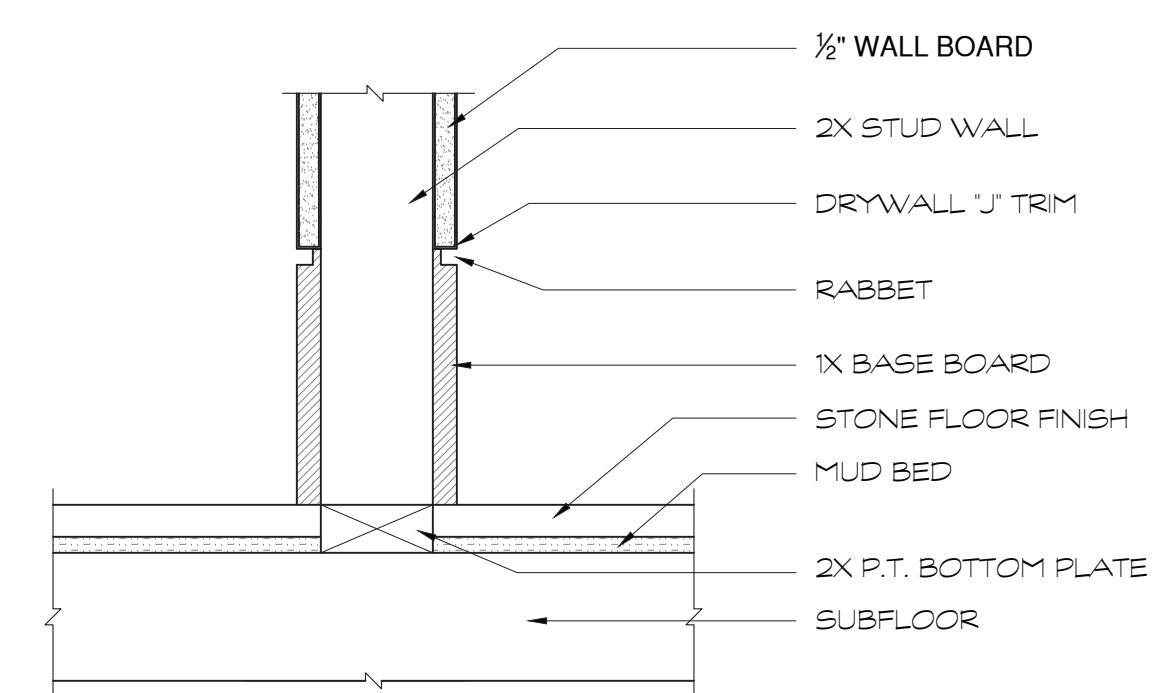
TYPICAL SINGLE STORY WALL SECTION

SCALE: 3/4" = 1'-0"



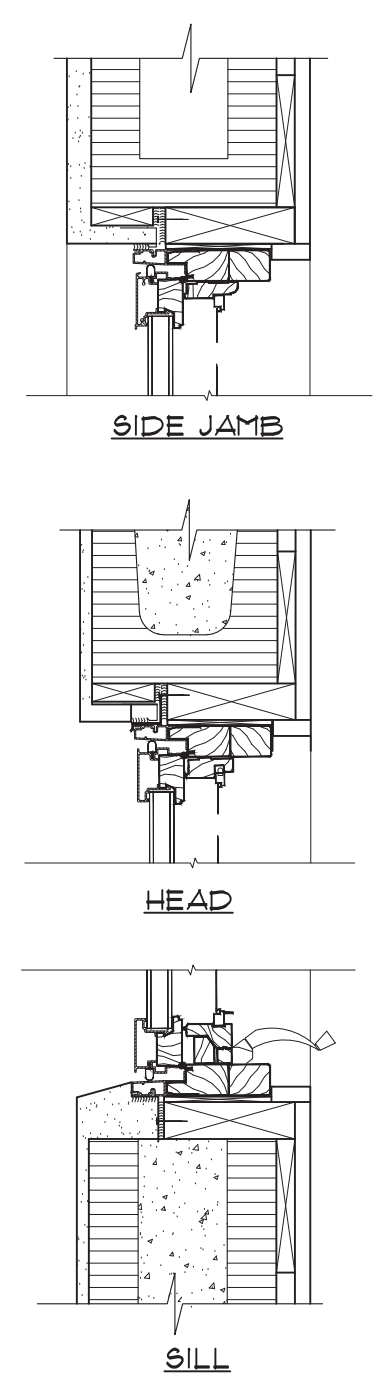
INTERIOR CORNER DETAIL

N.T.S.



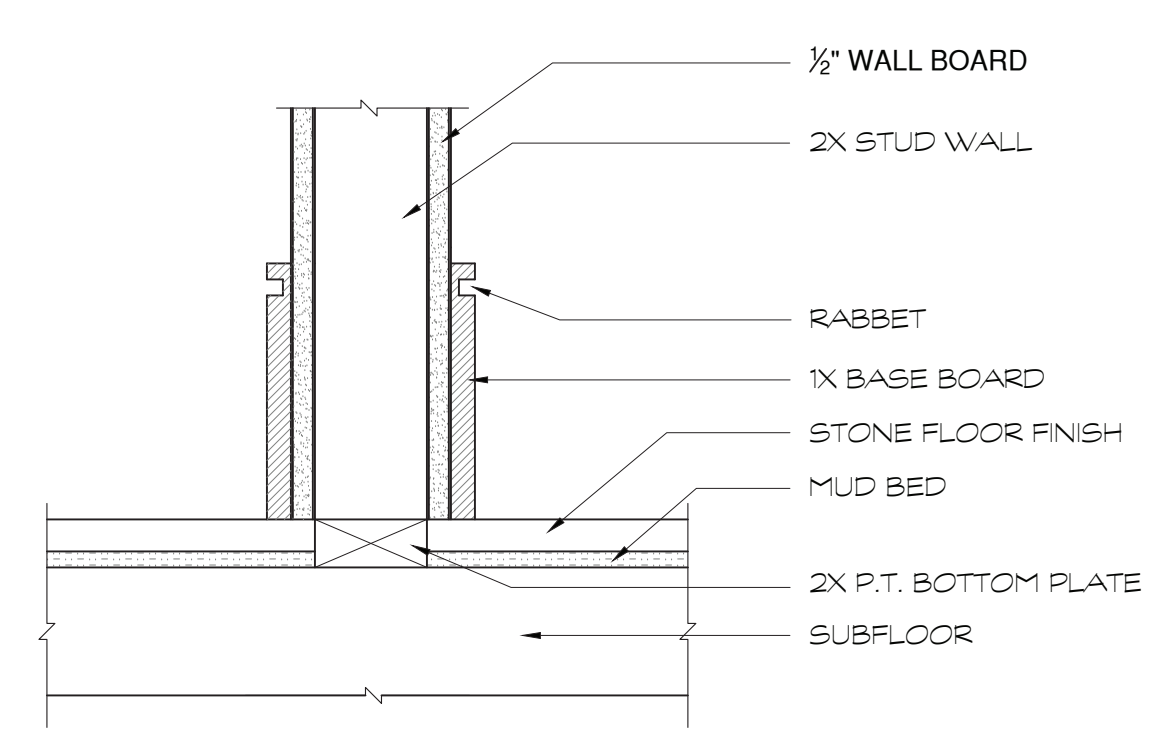
BASE BOARD DETAIL " A "

NOT TO SCALE



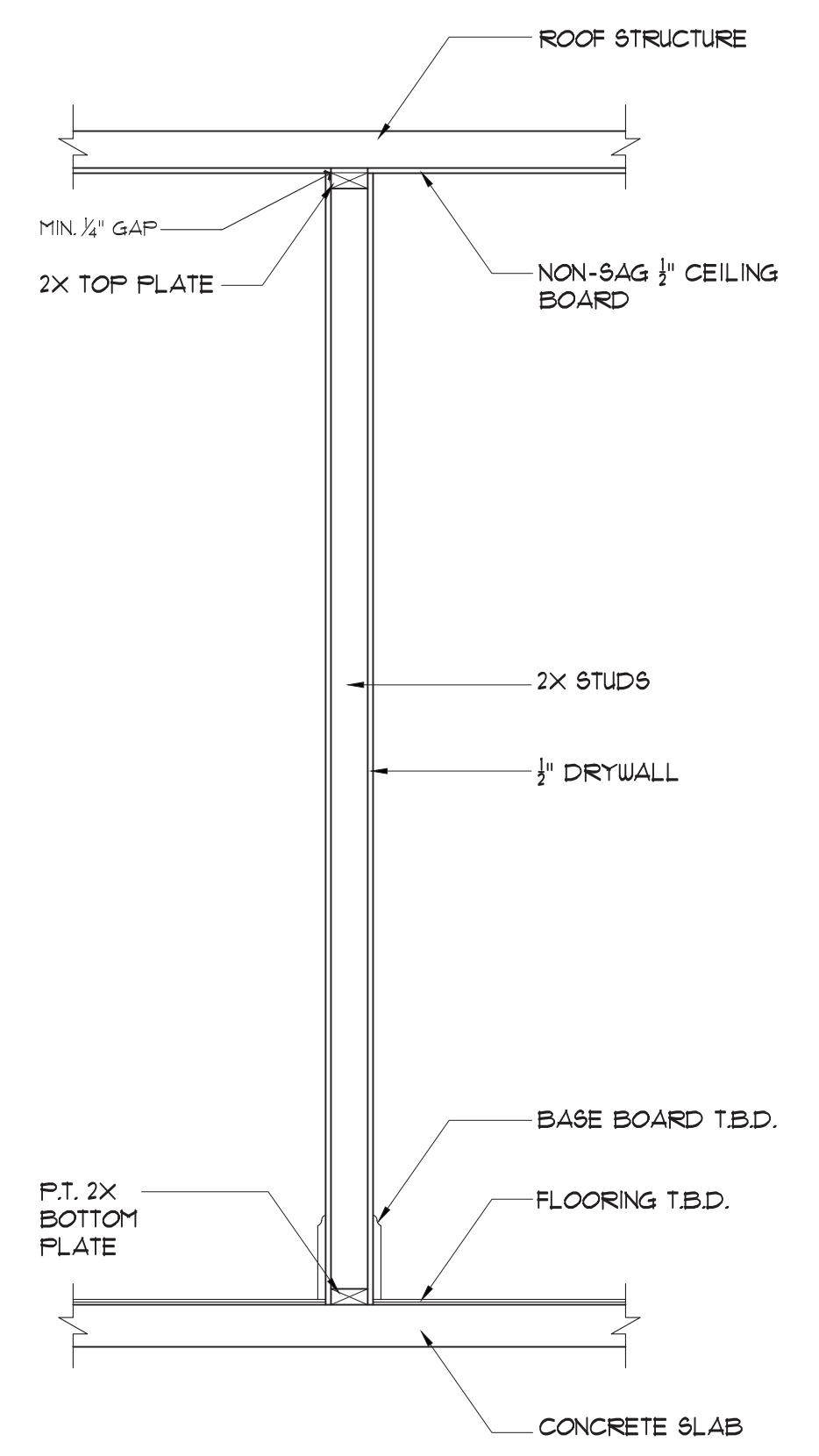
**WINDOW DETAIL
 COMPOSITE FRAME WINDOW**

N.T.S. - DRYWALL RETURNS



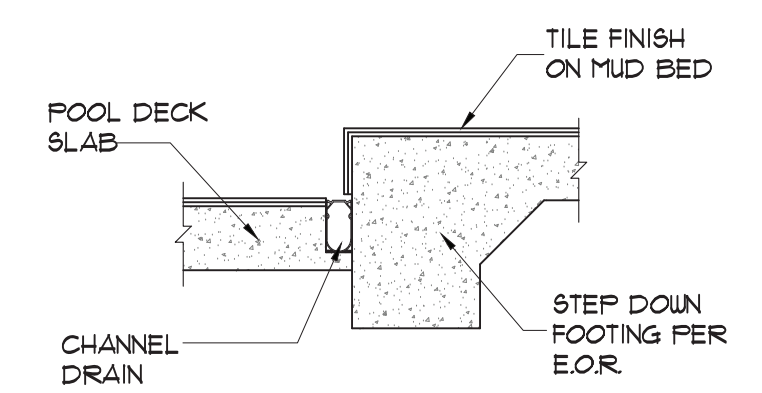
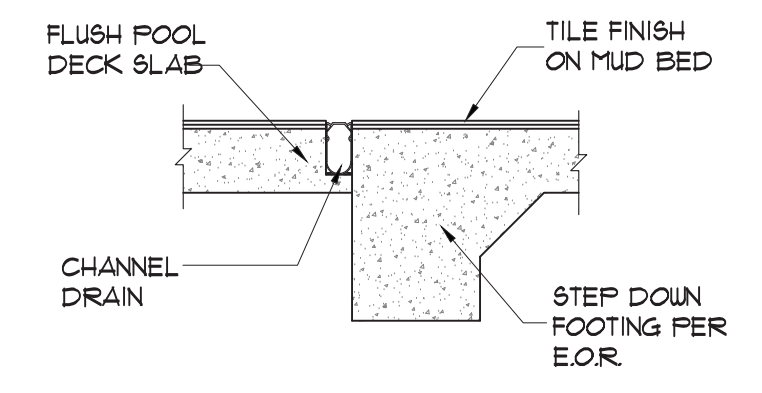
BASE BOARD DETAIL " B "

NOT TO SCALE



INTERIOR NON-BEARING WALL

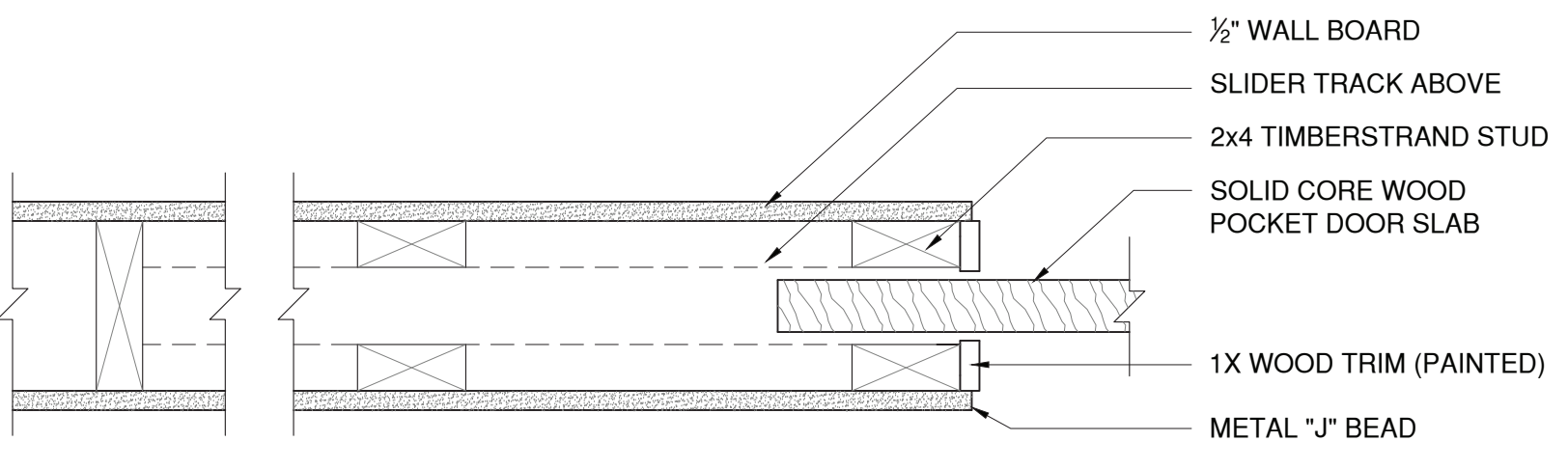
SCALE: 3/4" = 1'-0"



1. ALL DIMENSIONS ARE TO BE FIELD VERIFIED. 2. SEE DRAIN MANUFACTURE FOR INSTALLATION DETAILS AND DIMENSIONS.

CHANNEL DRAIN DETAILS

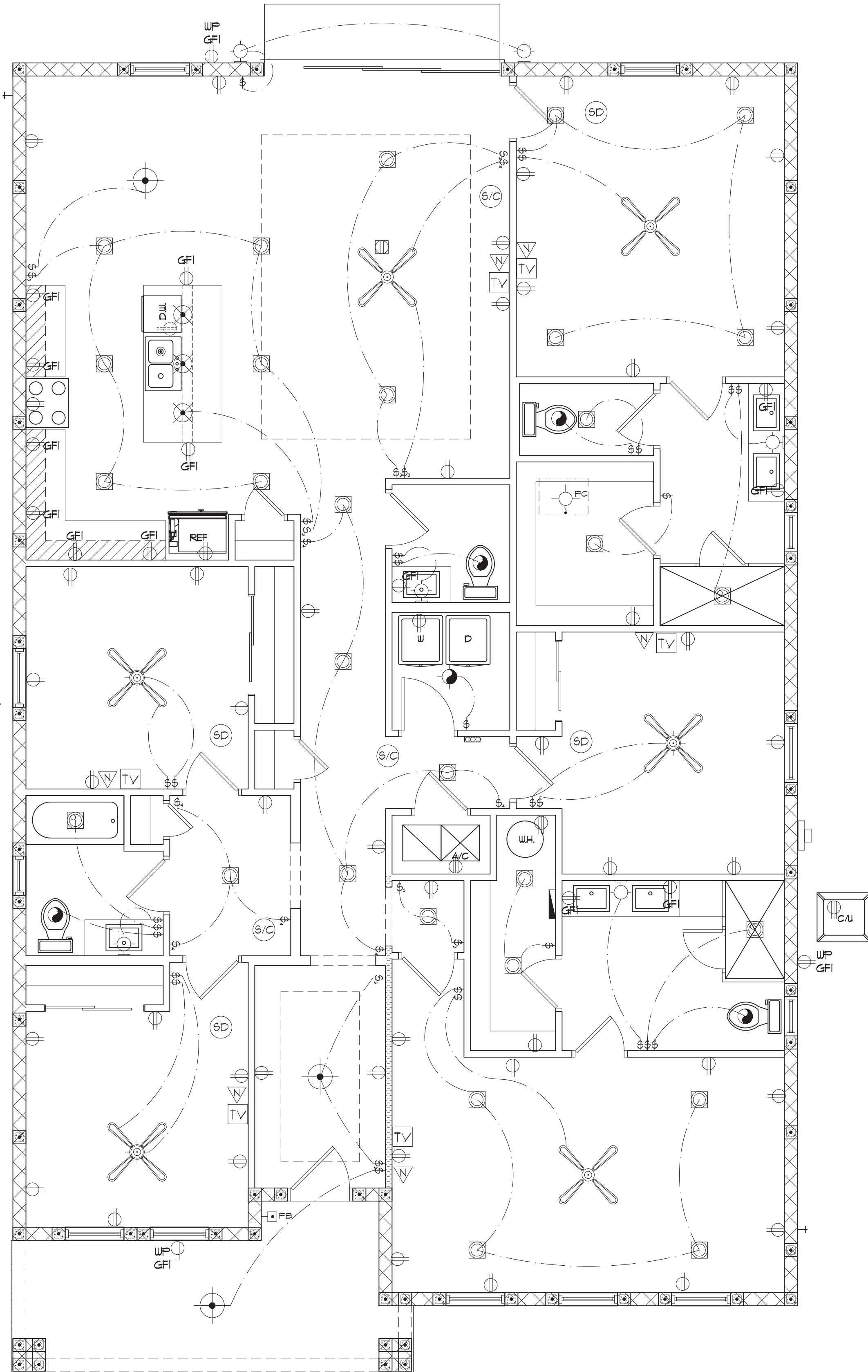
SCALE: 1" = 1'-0"



INTERIOR DOOR JAMB FINISH DETAIL

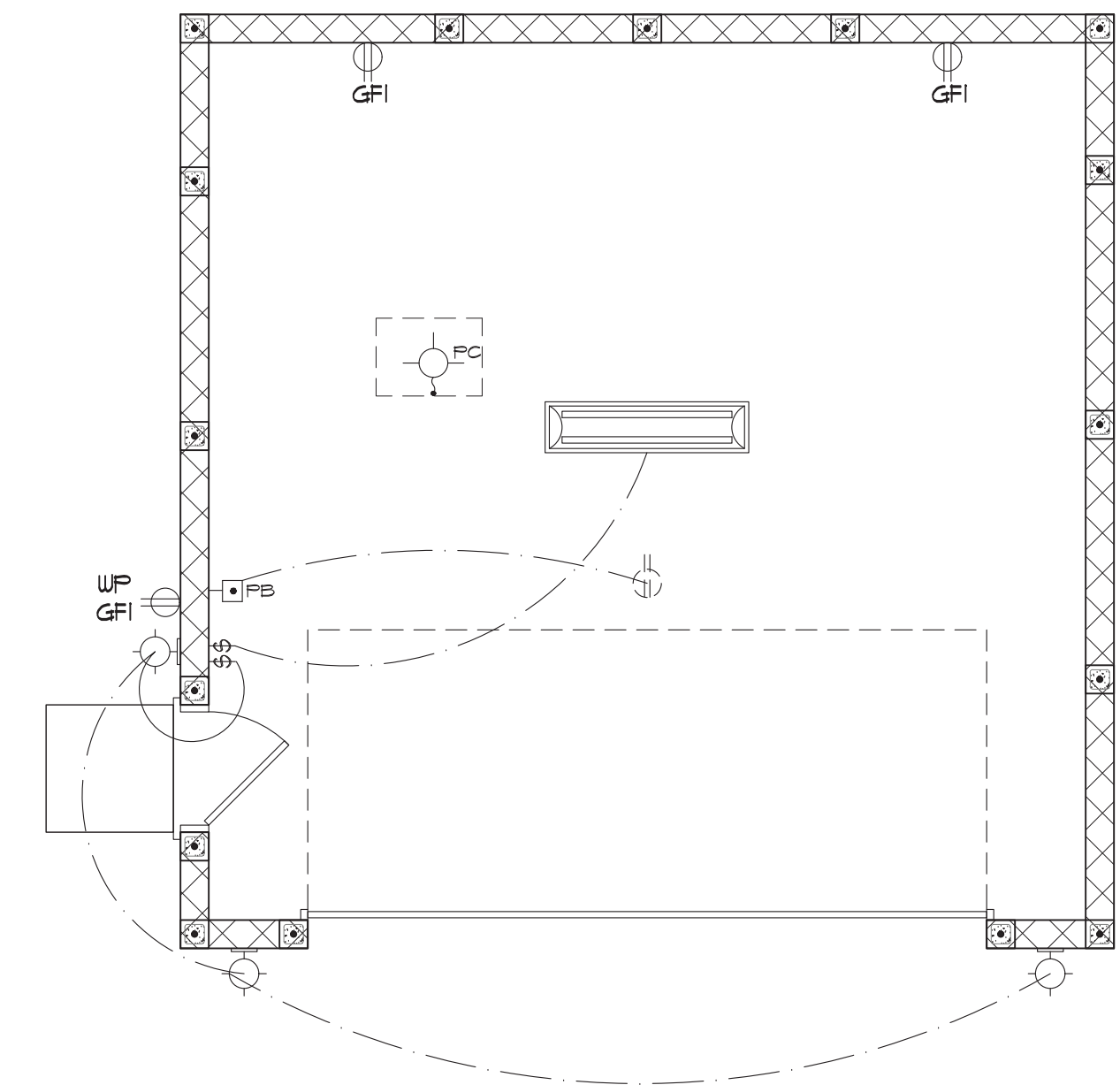
NOT TO SCALE

1. UNLESS OTHERWISE SPECIFICALLY STATED HEREIN, THE ELECTRICAL PLAN(S) ARE ONLY FOR GENERAL DESIGN INTENT AND HAVE BEEN COMPILED TO MEET PERMIT REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. ACTUAL QUANTITY, TYPE, AND PLACEMENT OF OUTLETS, SWITCHES, FIXTURES, AND ALL OTHER RELATED ELECTRICAL EQUIPMENT SHALL BE DETERMINED BY THE CONTRACTOR AND OWNER. INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES.
2. CONTRACTOR SHALL VERIFY WITH POWER COMPANY THE LOCATION OF SERVICE AND SHALL LOCATE METER AND PANEL AS REQUIRED.
3. ALL WIRES SHALL BE THW COPPER, UNLESS NOTED OTHERWISE.
4. WHERE REQUIRED BY OTHER CODES, SERVICE AND FEEDER CONDUCTORS SHALL BE COPPER OF EQUAL AMPACITY.
5. ALL BRANCH CIRCUITS IN RACEWAY OR NON-METALLIC SHEATHED CABLE.
6. COORDINATE RACEWAY INSTALLATIONS WITH OTHER TRADES PRIOR TO CONSTRUCTION.
7. VERIFY ALL CONDUCTORS AND BREAKERS WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
8. PROVIDE DISCONNECT SWITCH SIZE AS REQUIRED BY LOAD AND UNITS.
9. PROVIDE NON-FUSIBLE GENERAL DUTY SAFETY SWITCHES AT A/C EQUIPMENT, AND AT PUMPS NOT VISIBLE FROM CIRCUIT BREAKER PANEL AND AS PER MANUFACTURER'S RECOMMENDATIONS.
10. PROVIDE GROUND FAULT INTERRUPT (GFI) BREAKERS FOR ALL BATHROOM, GARAGE AND EXTERIOR OUTLETS AS SHOWN.
11. ELECTRICAL FIXTURES, TRIM AND APPLIANCES SHALL BE 'UL' APPROVED AND SELECTED BY OWNER.
12. PROVIDE PRE-WIRED TELEPHONE AND TELEVISION (CABLE TV) OUTLETS.
13. WIRE KITCHEN AND FAMILY ROOM SEPARATELY.
14. ELECTRICAL SERVICE SIZE SHALL BE DESIGNED BY THE ELECTRICAL CONTRACTOR. THIS PLAN SHALL BE USED AS A GUIDE, POWER REQUIREMENTS SHALL BE DETERMINED BY TOTAL LOAD OF THE HOUSE.
15. PROVIDE AFCIs (ARC FAULT INTERRUPTERS) IN ALL DWELLING UNIT BEDROOMS PER NEC.
16. INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, INSTALL COMBO SMOKE & CO2 DETECTORS AT TOP AND BOTTOM OF STAIRS AND WITHIN 10'-0" OF SLEEPING ROOMS. ALL DETECTORS ARE TO BE INTERCONNECTED AND HAVE BATTERY BACKUPS.



ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
Ⓢ	SWITCH
Ⓢ	THREE WAY SWITCH
Ⓢ	FOUR WAY SWITCH
Ⓢ	DIMMER SWITCH
Ⓢ	110v OUTLET
Ⓢ	110v OUTLET, GFCI
Ⓢ	110v OUTLET, WEATHER PROOF GFCI
Ⓢ	110v OUTLET, CEILING
Ⓢ	110v OUTLET, BELOW
Ⓢ	110v OUTLET, SWITCHED
Ⓢ	220v OUTLET
Ⓢ	FLOOR OUTLET
Ⓢ	SURFACE MOUNTED INCANDESCENT LIGHT
Ⓢ	WALL SCONCE
Ⓢ	LARGE PENDANT FIXTURE
Ⓢ	PENDANT FIXTURE
Ⓢ	INGROUND UPLIGHT
Ⓢ	LIGHT/FAN COMBO UNIT
Ⓢ	BATH FAN
Ⓢ	RECESSED LED LIGHT
Ⓢ	DIRECTIONAL RECESSED LED LIGHT
Ⓢ	RECESSED LED LIGHT - VAPOR PROOF
Ⓢ	LED BACKLIGHTING
Ⓢ	HEADER LIGHT FIXTURE
Ⓢ	SQUARE PENDANT LIGHT FIXTURE
Ⓢ	RECESSED RISER LIGHT
Ⓢ	RECESSED WALL MOUNTED OUTDOOR LIGHT
Ⓢ	2' x 4' LED LIGHT
Ⓢ	SMOKE DETECTOR
Ⓢ	COMBO SMOKE/CARBON MONOXIDE DETECTOR
Ⓢ	TV OUTLET
Ⓢ	NETWORK JACK
Ⓢ	ELECTRICAL PANEL
Ⓢ	ELECTRICAL METER
Ⓢ	PUSH BUTTON
Ⓢ	INTERCOM
Ⓢ	GARBAGE DISPOSAL
Ⓢ	CHIMES
Ⓢ	ELEVATOR CALL BUTTON
Ⓢ	ALARM KEY PAD
Ⓢ	JUNCTION BOX
Ⓢ	LAMP HOLDER - FULL CHAIN
Ⓢ	FLOOD LIGHTS
Ⓢ	CEILING FAN

ELECTRICAL PLAN IS INTENDED FOR BID PURPOSES ONLY. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, LATEST EDITION, BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION & SIZING OF ALL ELECTRICAL, WIRING & ACCESSORIES.



ELECTRICAL PLANS

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

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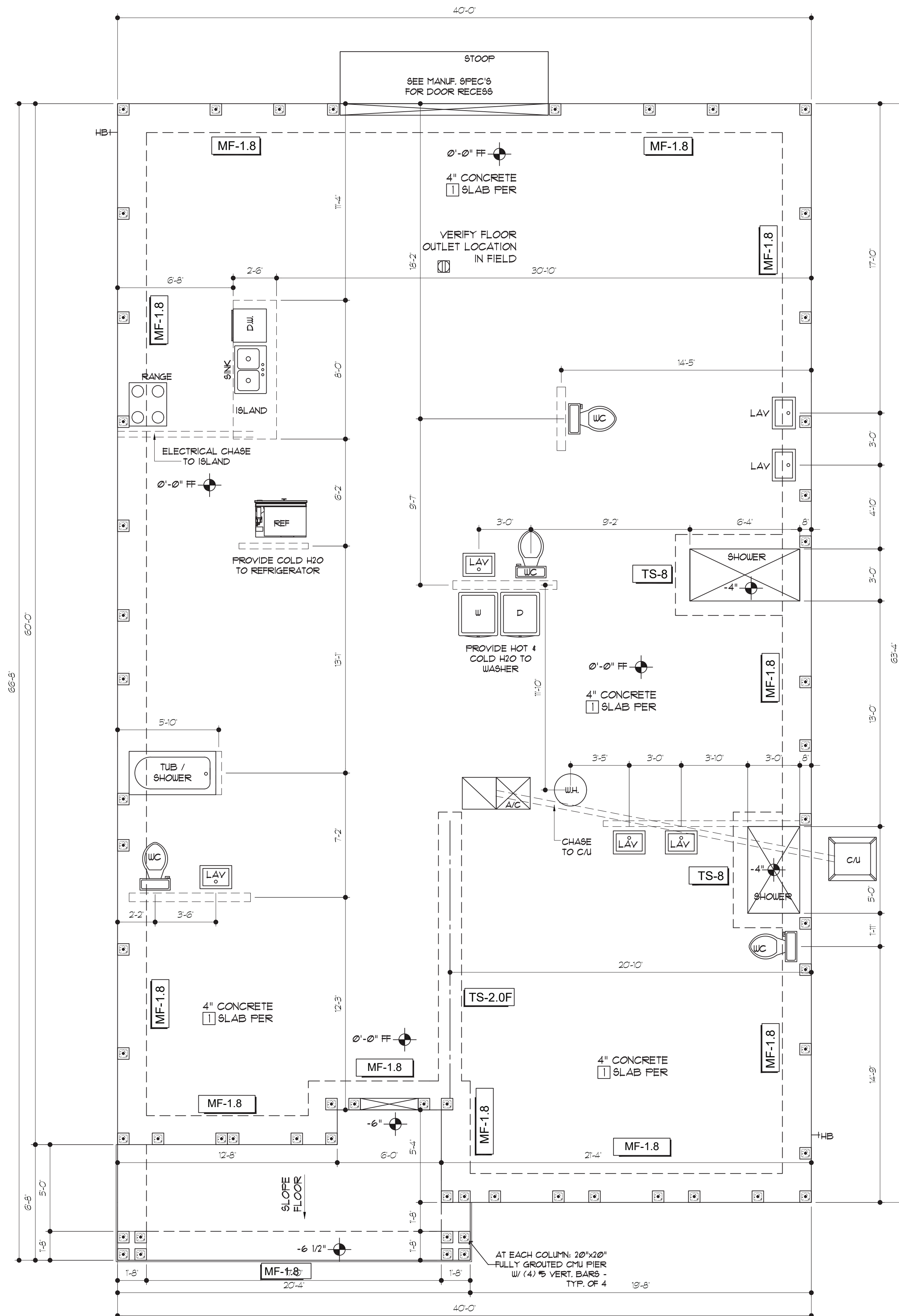
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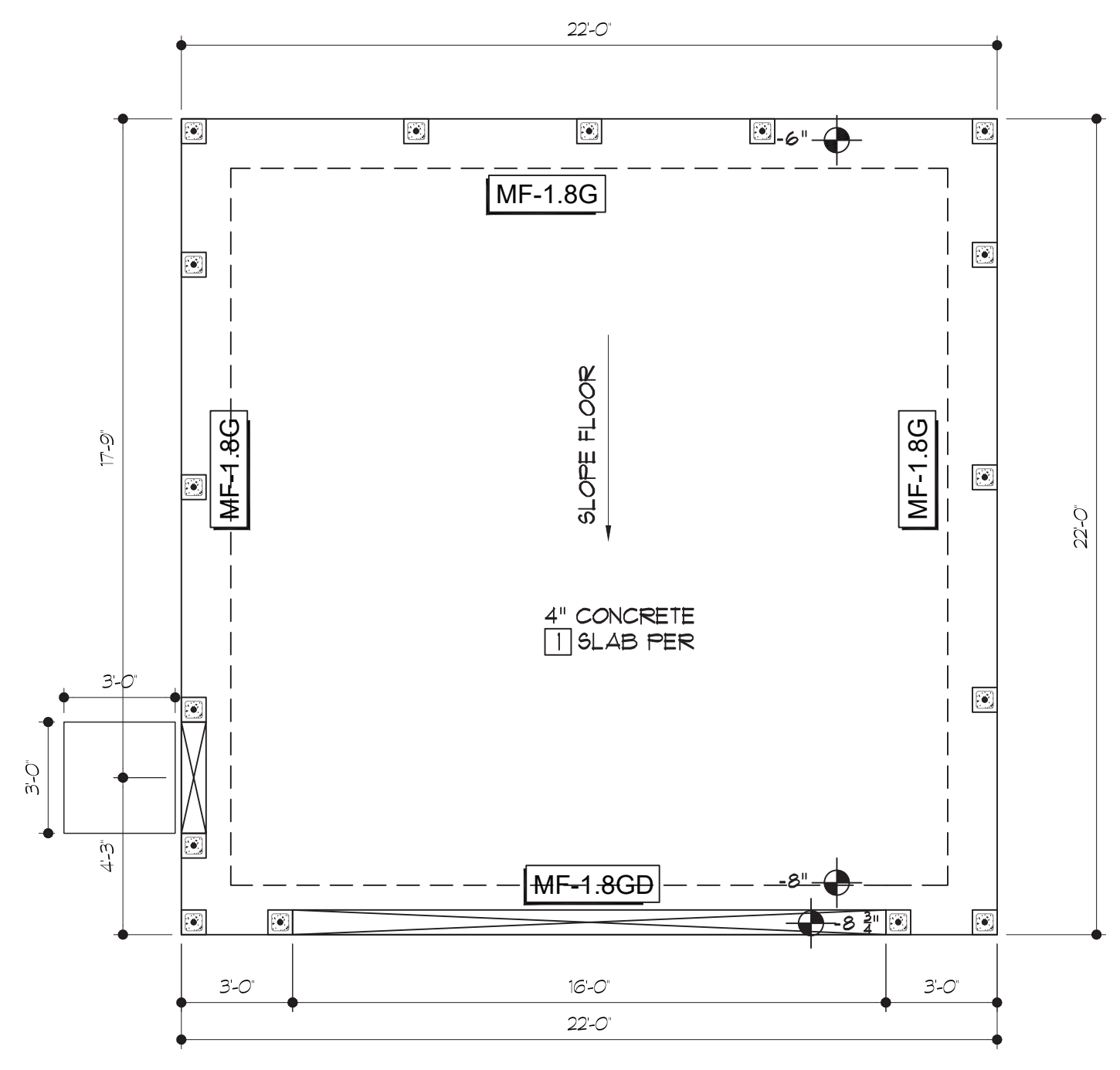
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FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

- SAWCUT OR CONTROL JOINTS SHALL BE LOCATED NOT TO EXCEED 400 SQ FT AND 15'-0" MAXIMUM SPACING
- 8x8" SOLID GROUTED CELL (3,000 PSF) WITH (1) #5 VERTICAL REBAR FROM FOOTING UP TO TIE BEAM
- FS FILL SOLID GROUTED CELLS UNLESS OTHERWISE NOTED, STEEL REINFORCING NOT REQUIRED
- EJ 1/2" PRE-MOLDED EXPANSION JOINT FILLER
- V.I.F. = VERIFY IN FIELD BY BUILDER AND INFORM ENGINEER
- UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO OUTSIDE OF SLAB FOR ADDITIONAL DIMENSIONING REFER TO ARCHITECTURAL SET OF PLANS
- NOTE: CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION
- 4" CONCRETE SLAB ON GRADE (3,000 PSF) REINF. W/ 6x6 10/10 W/M OR FIBERESH ON 6 MIL VAPOR BARRIER OVER CLEAN, WELL COMPACTED (MIN. 2,000 PSF) AND TERMITES TREATED SOIL WITH POISON CONTROL SYSTEM



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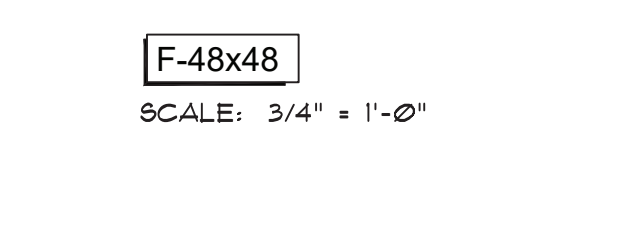
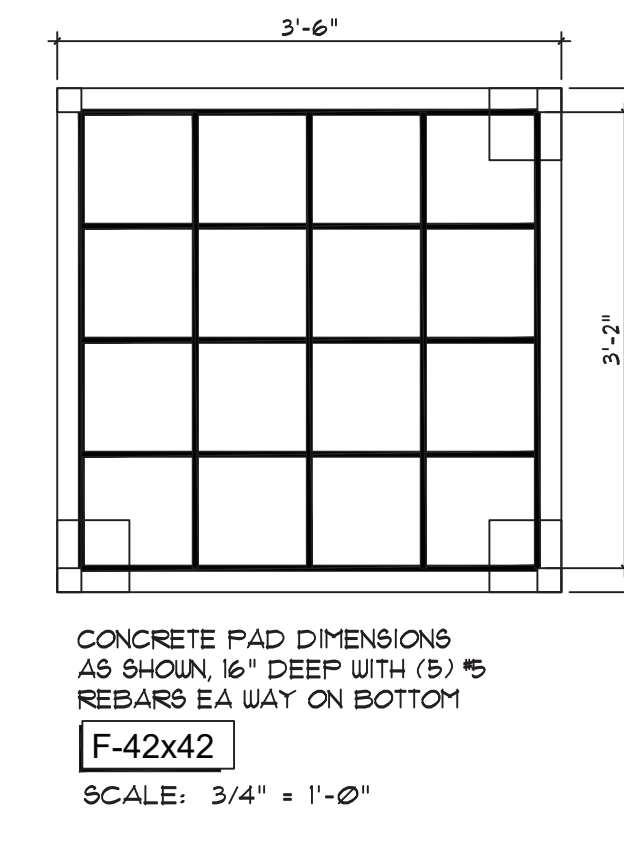
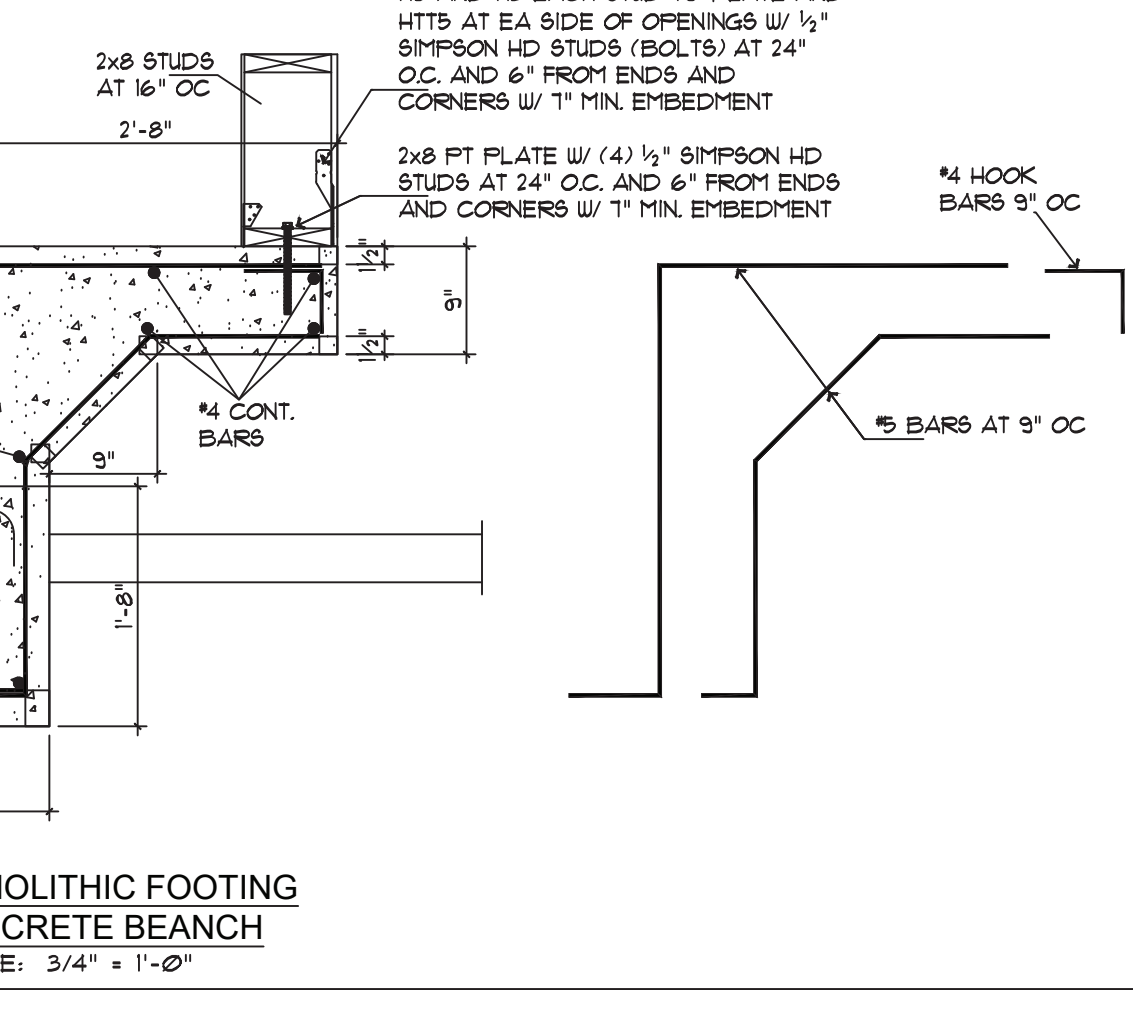
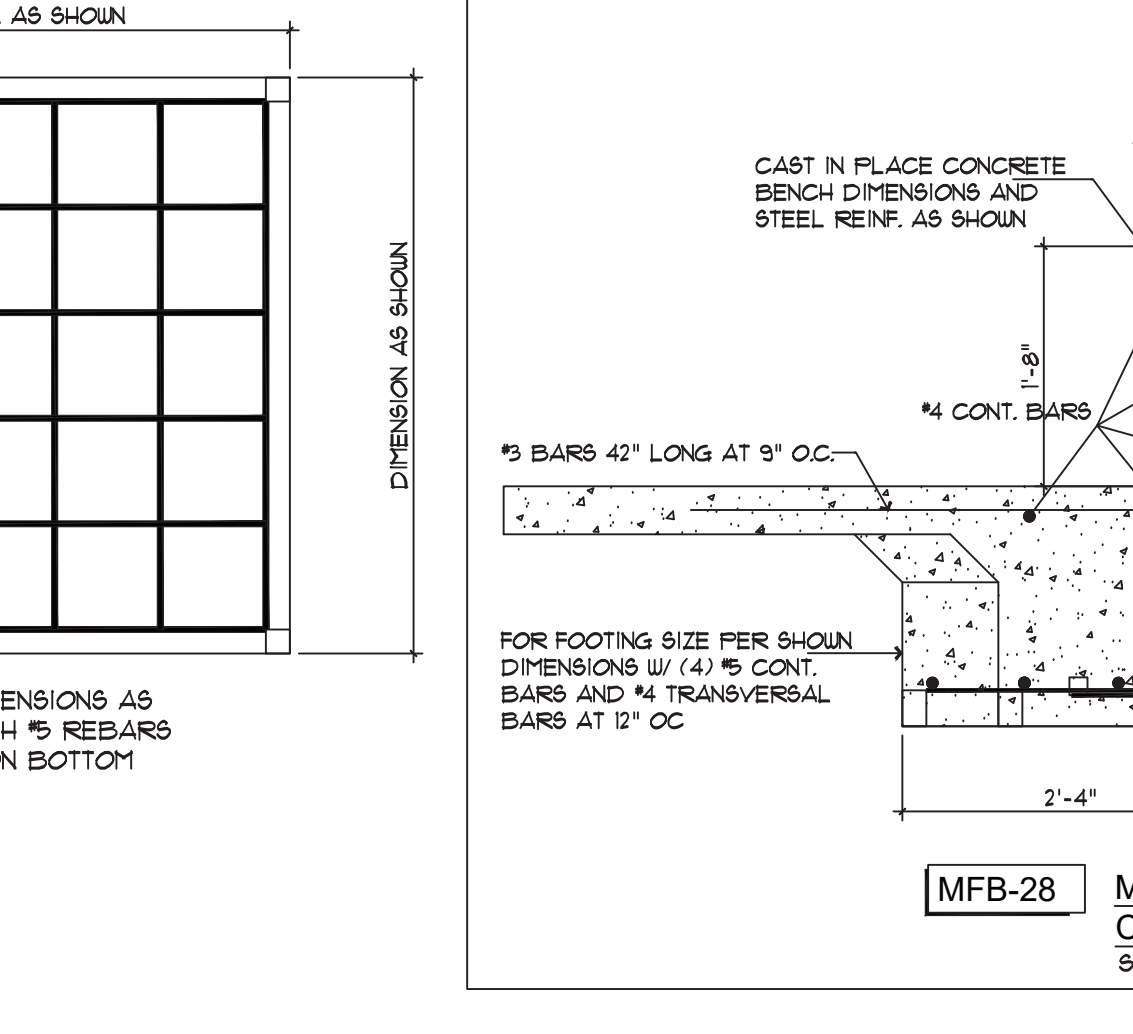
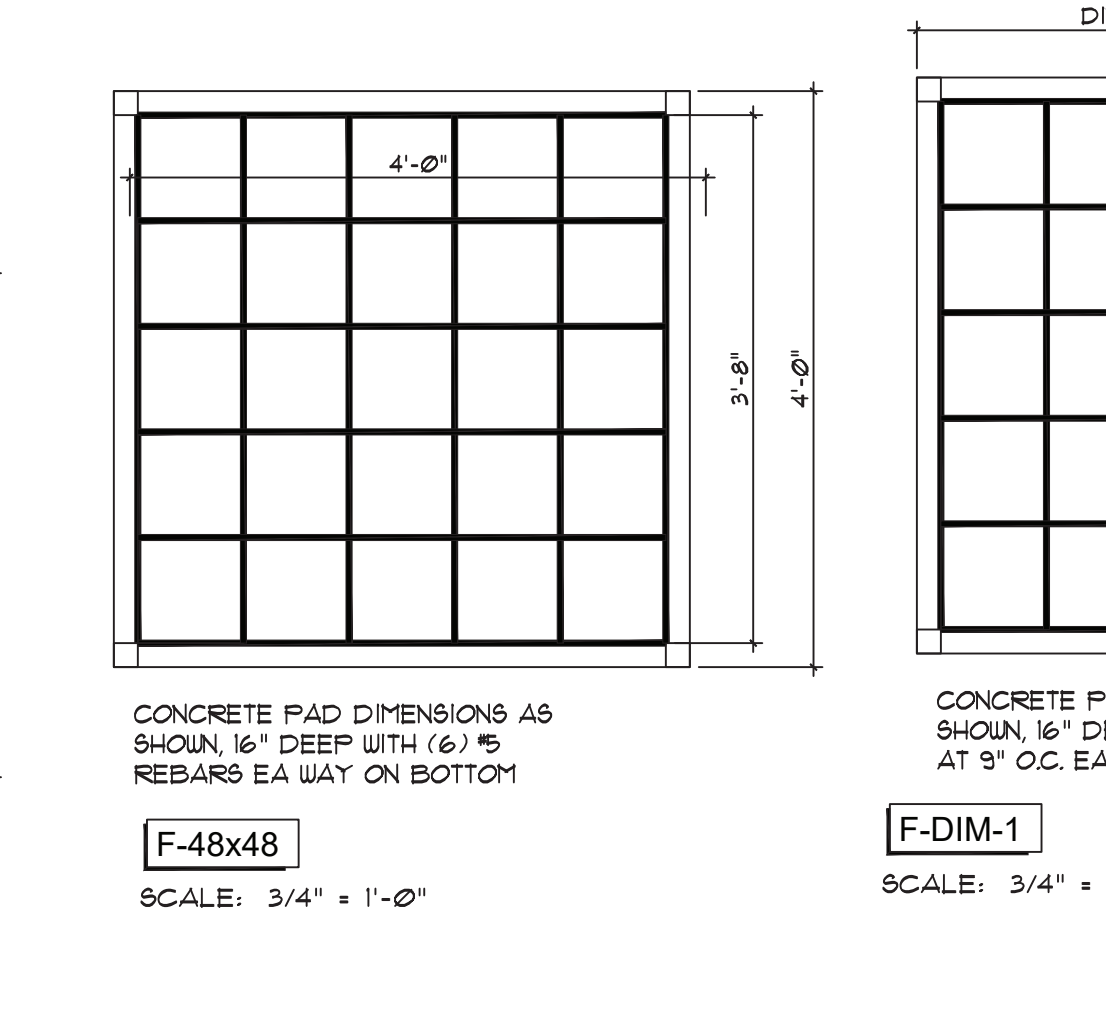
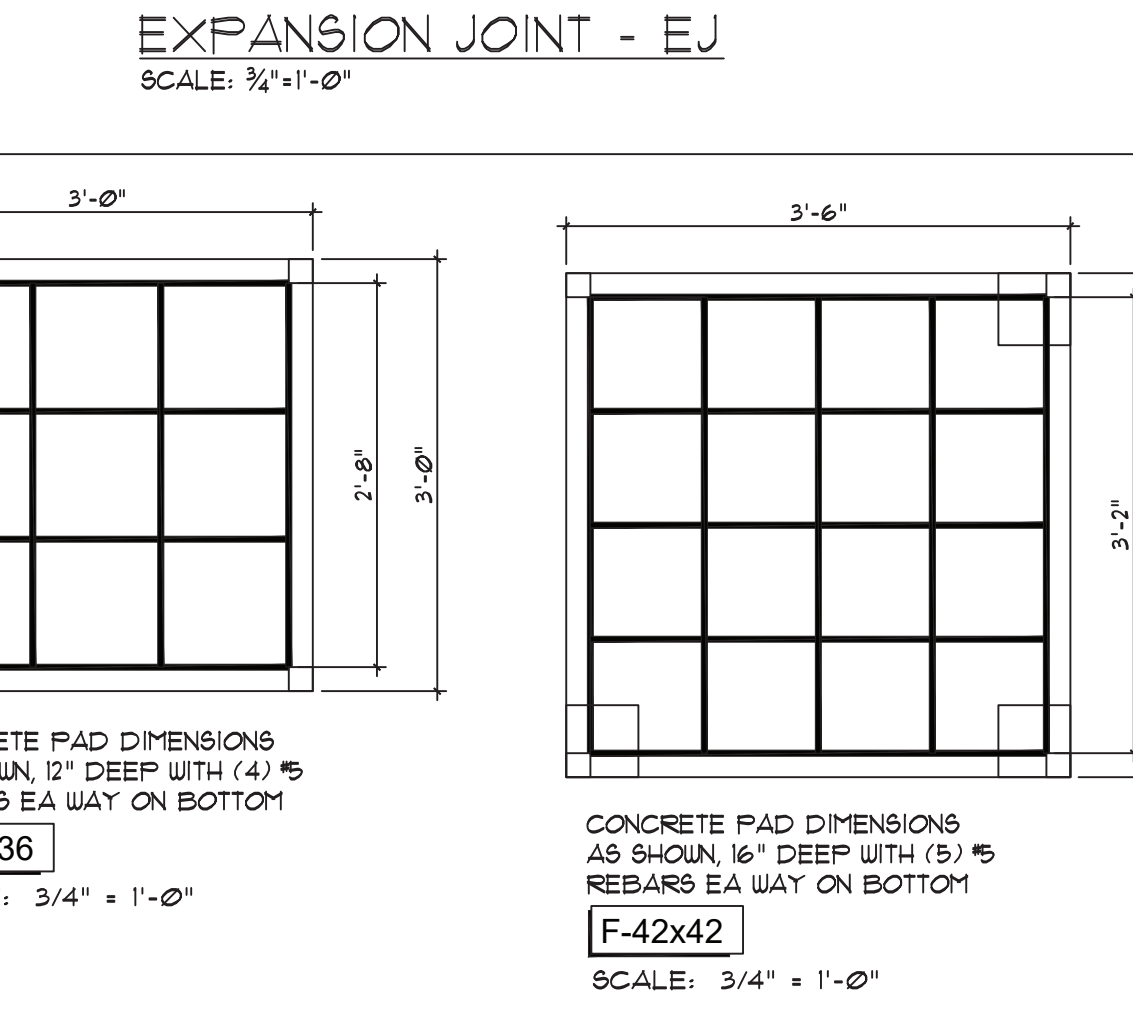
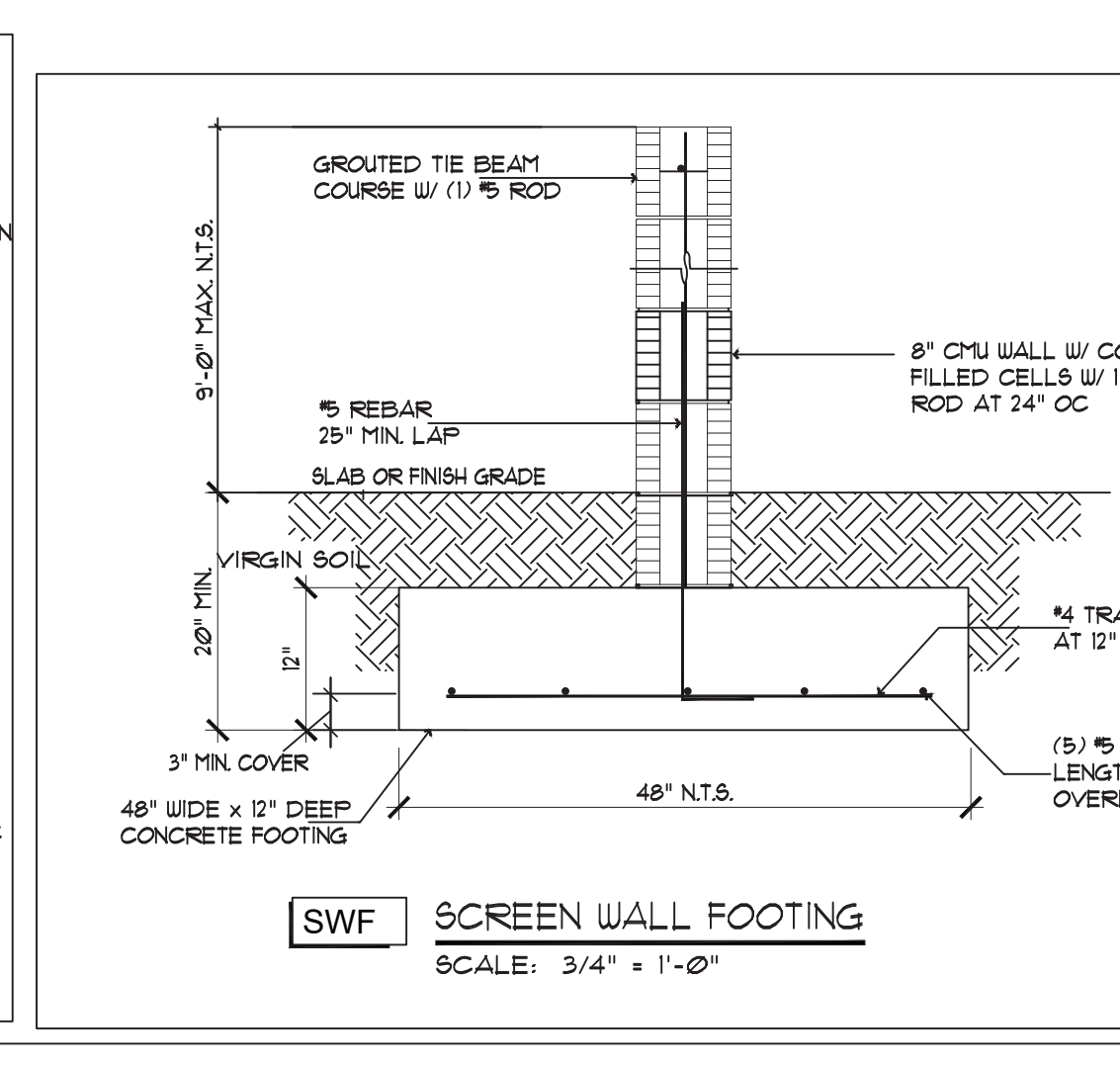
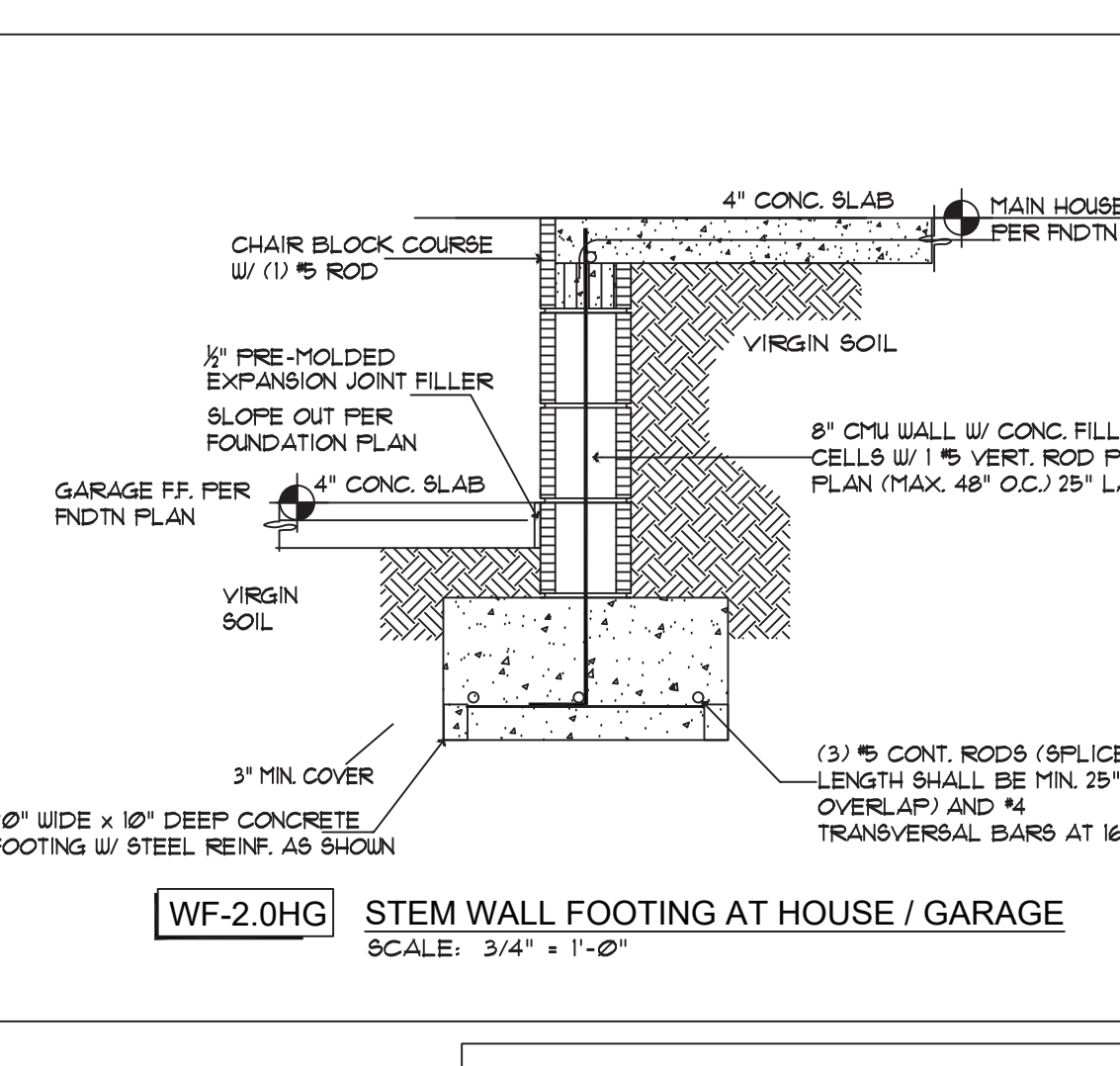
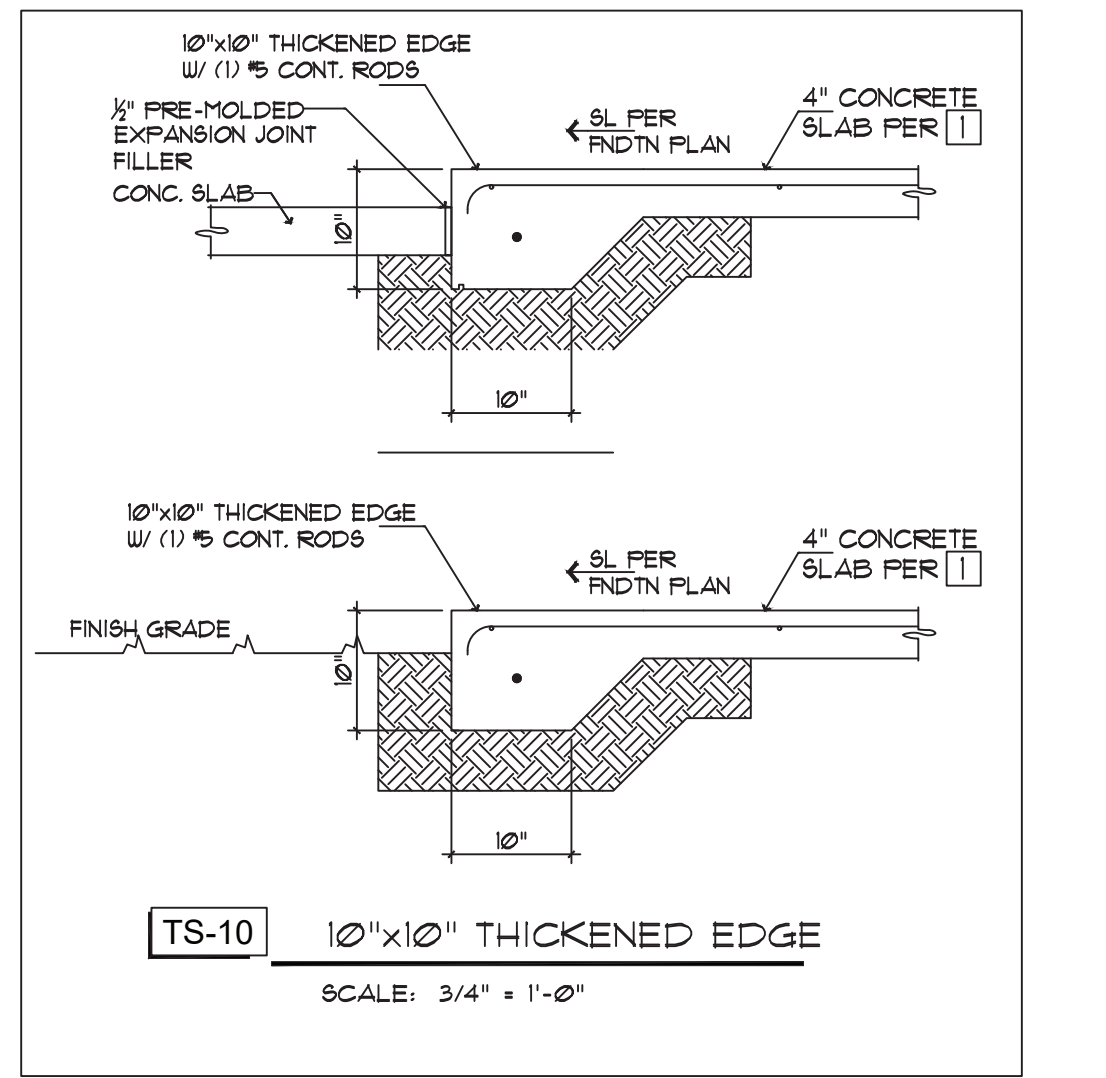
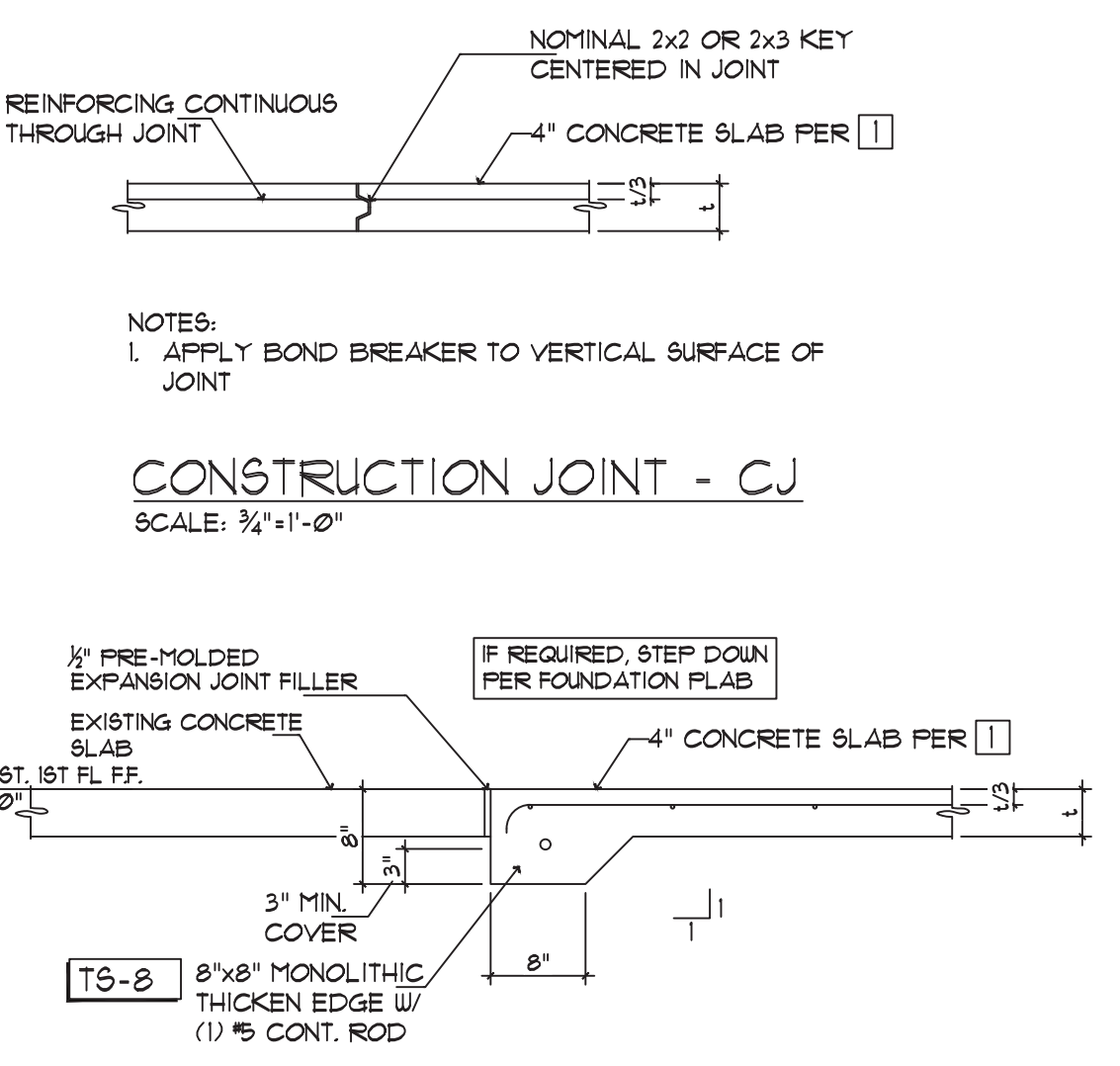
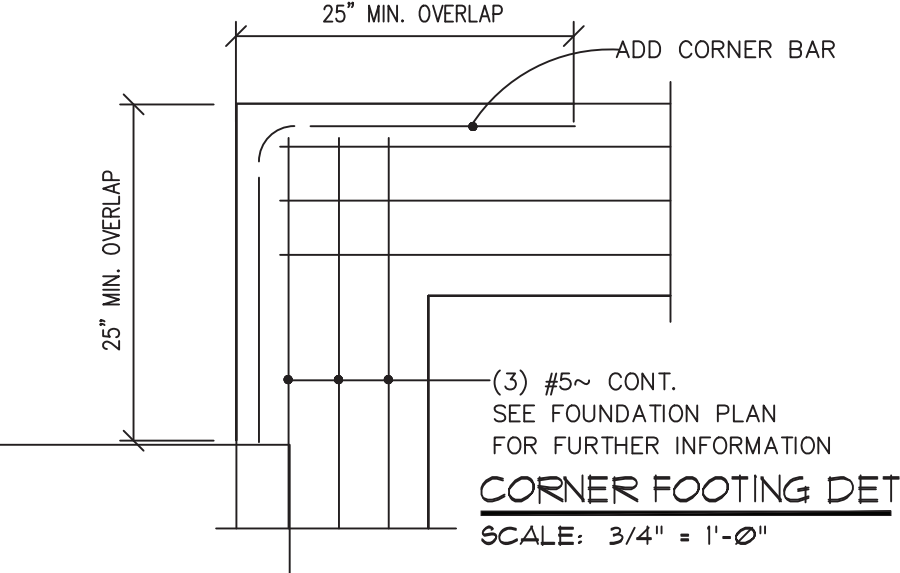
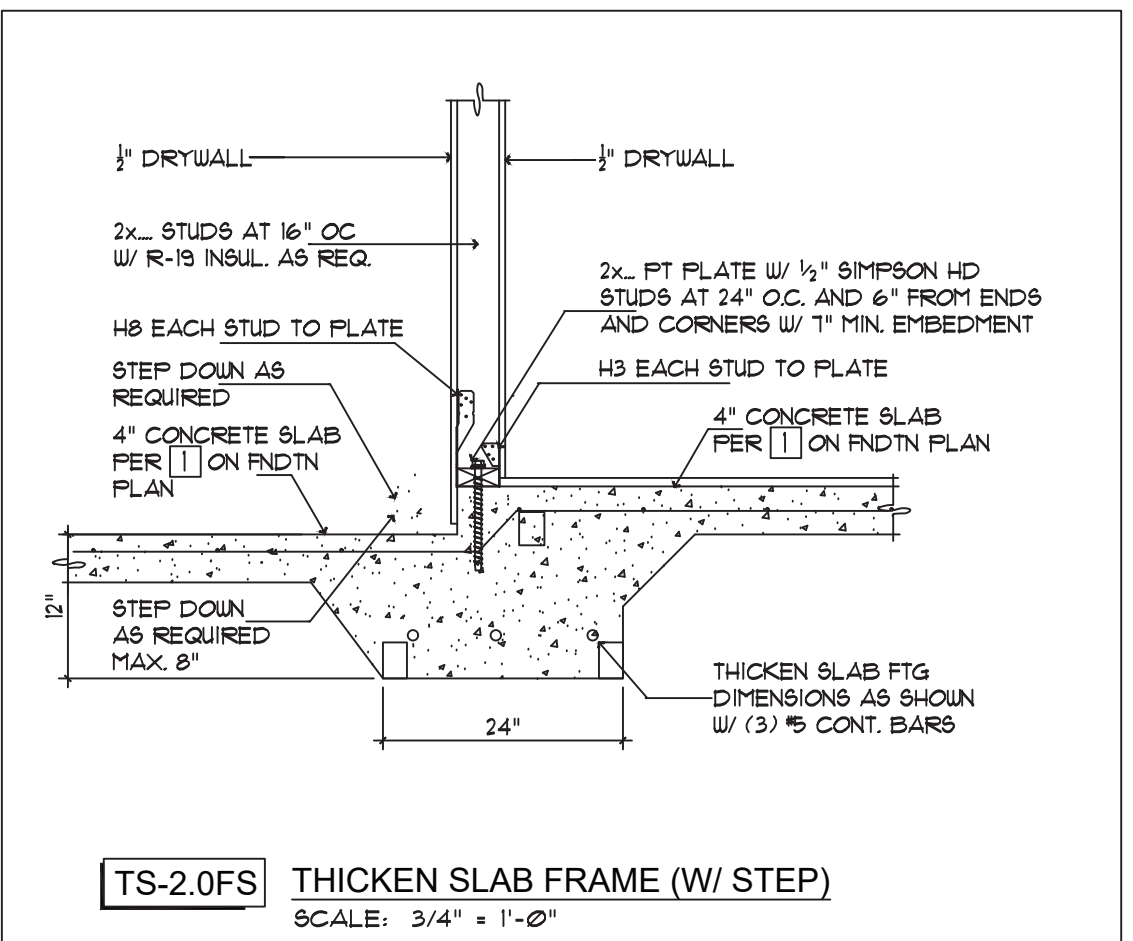
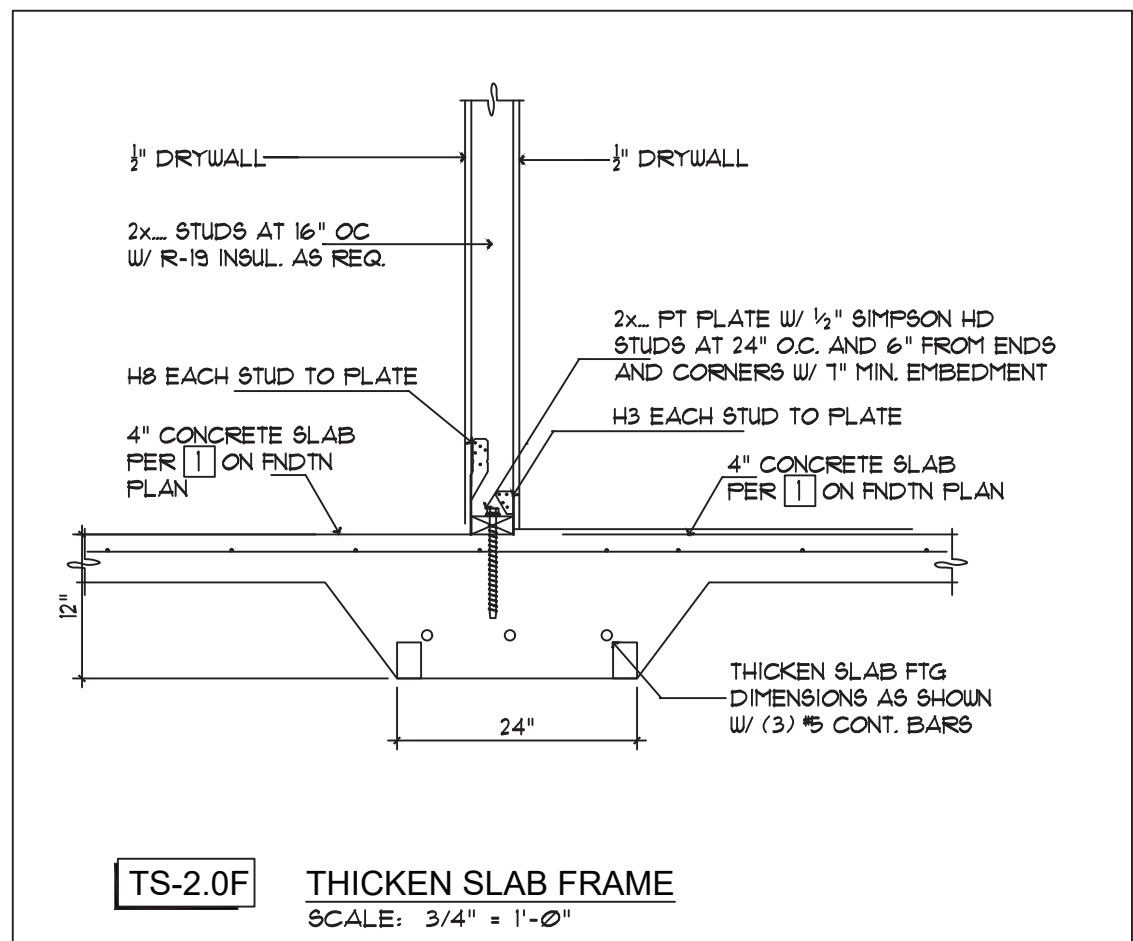
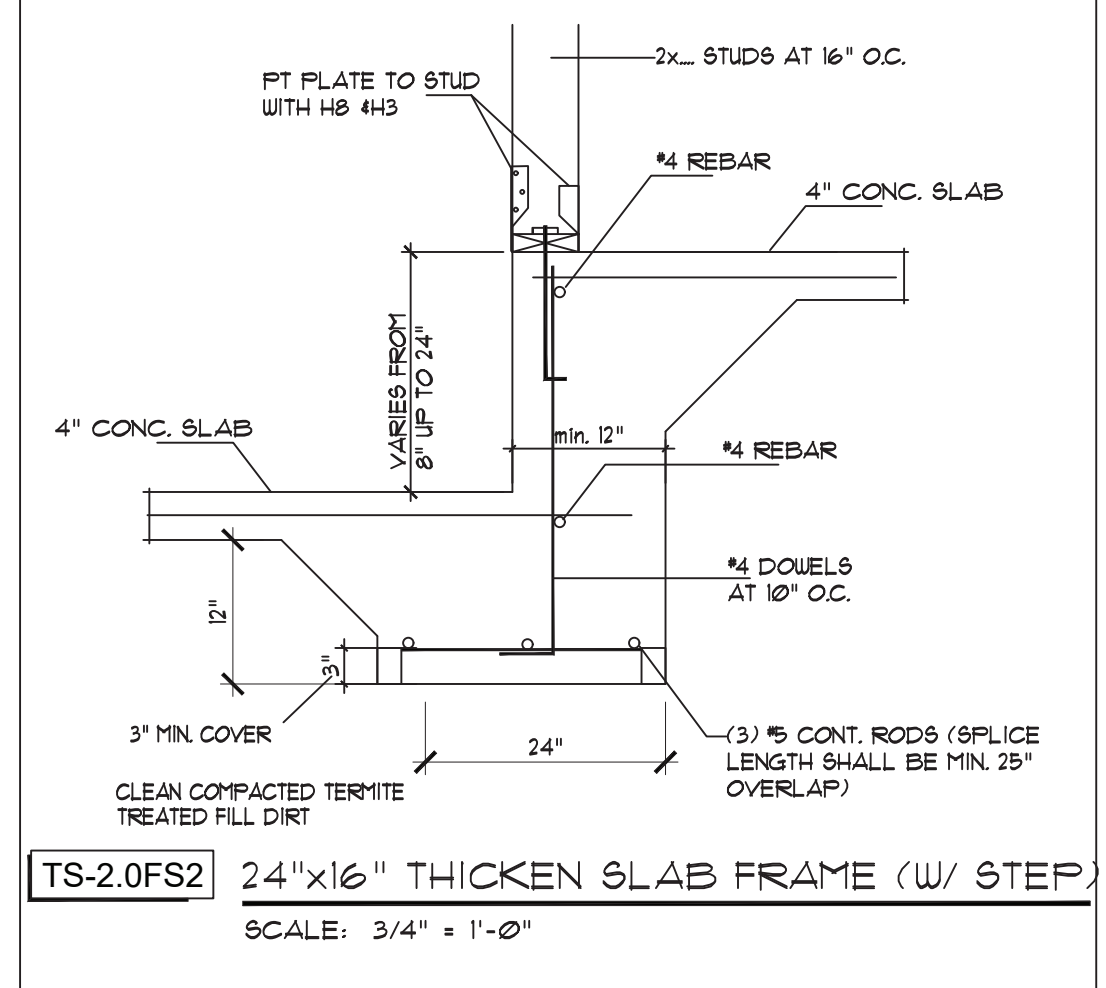
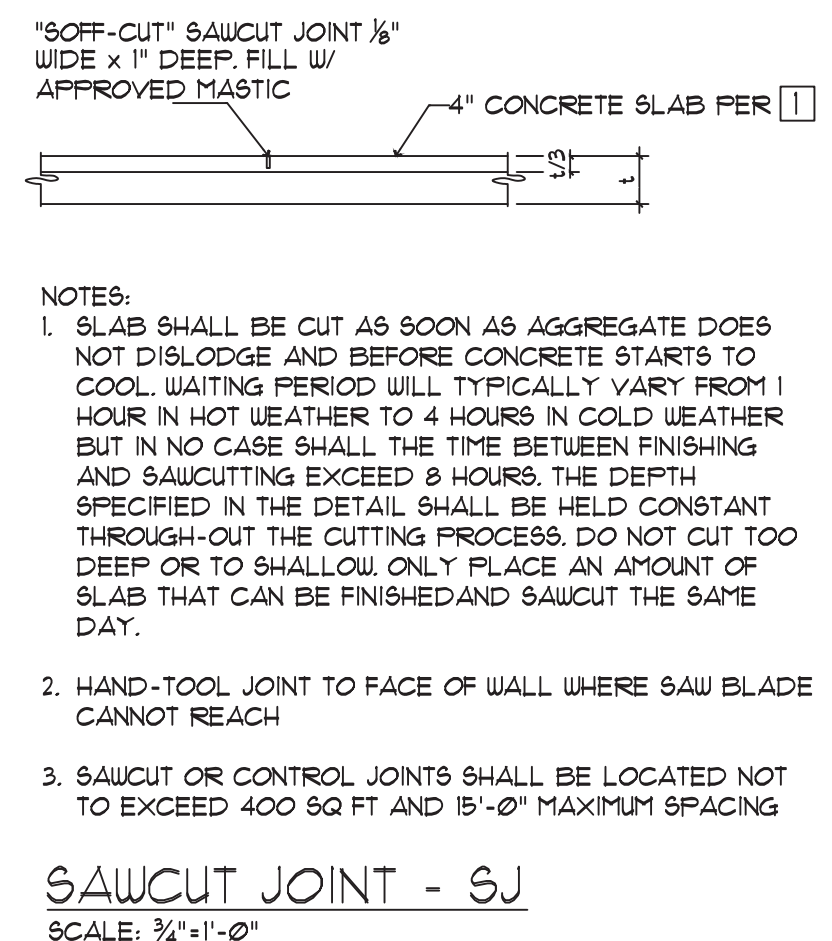
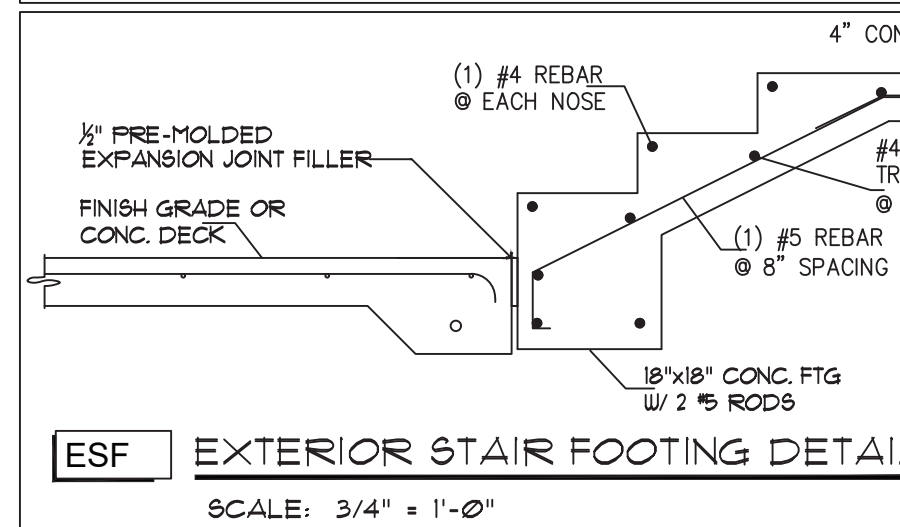
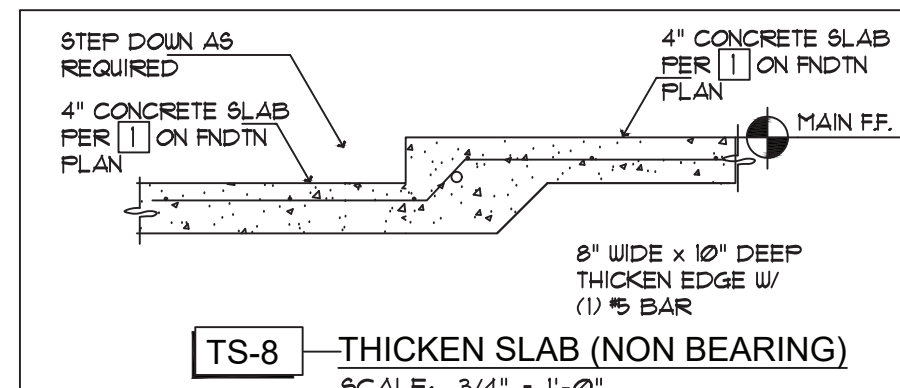
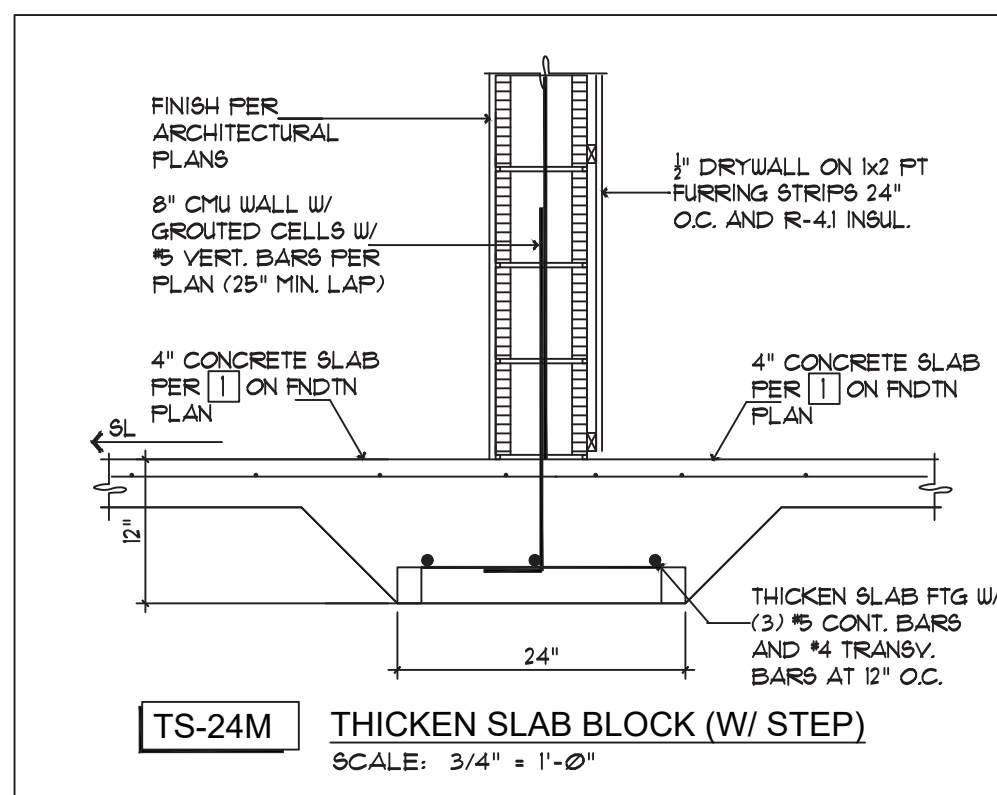
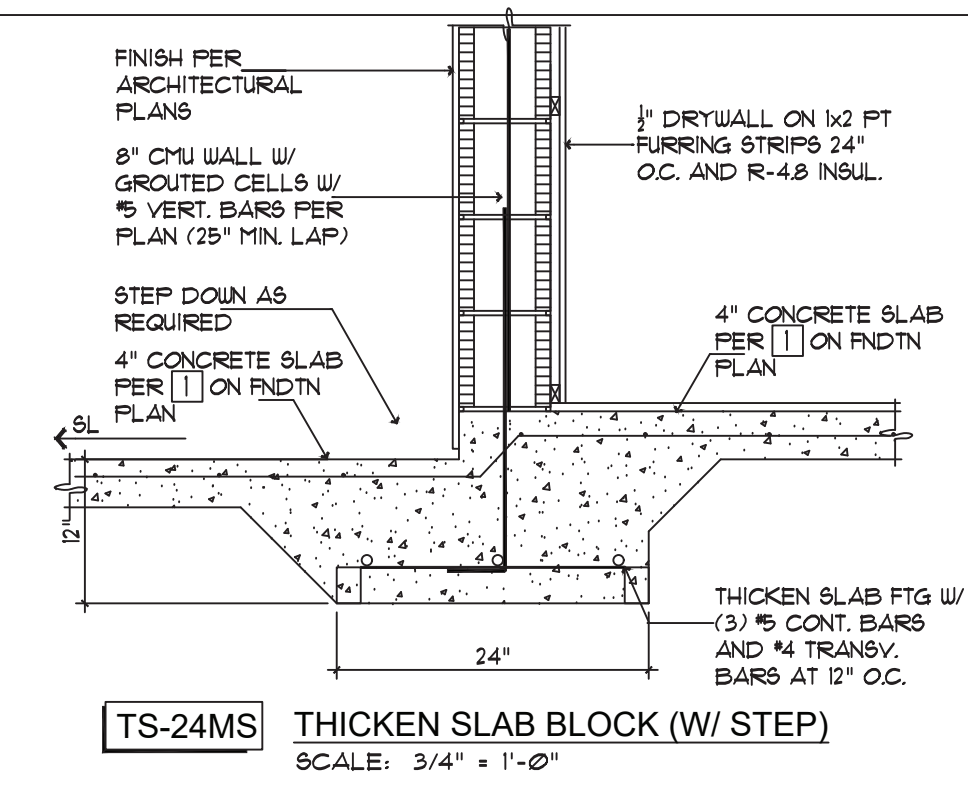
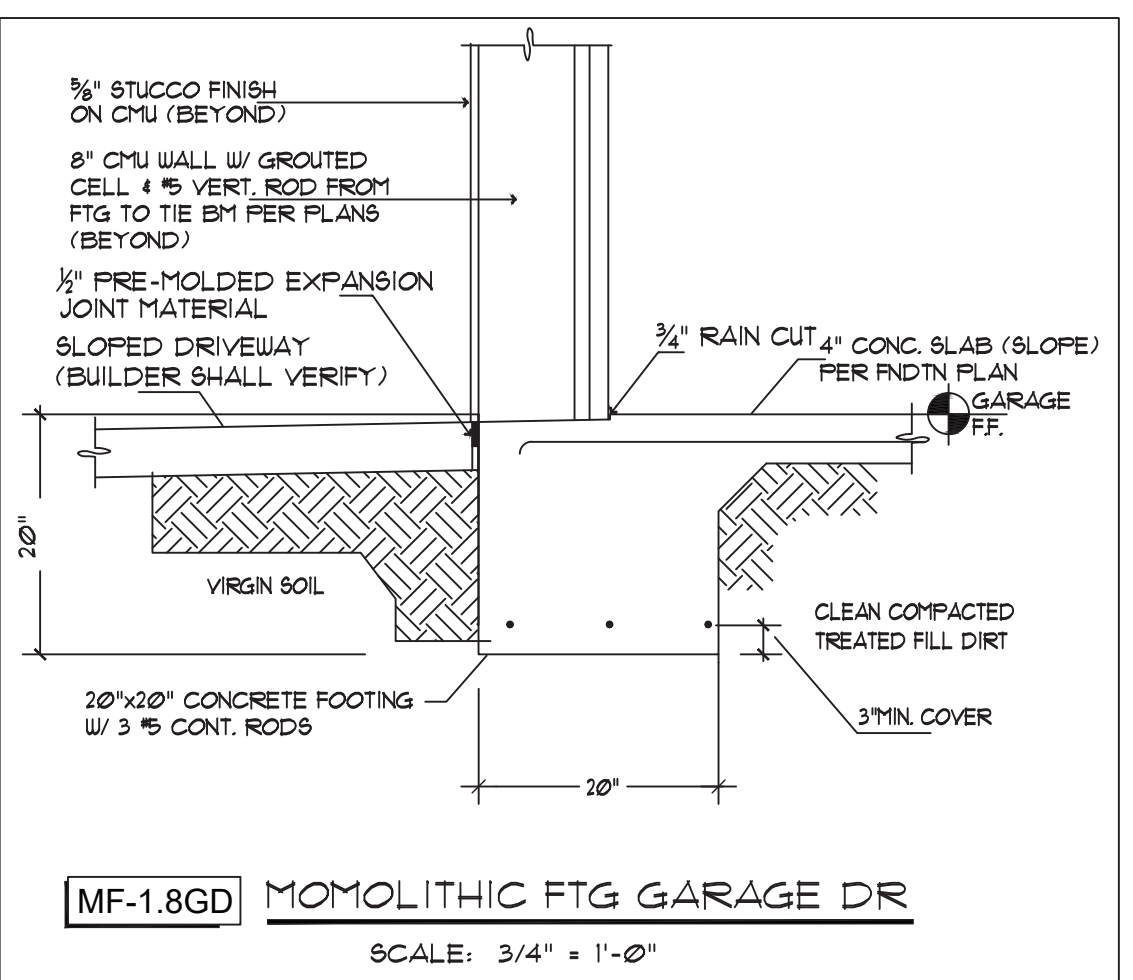
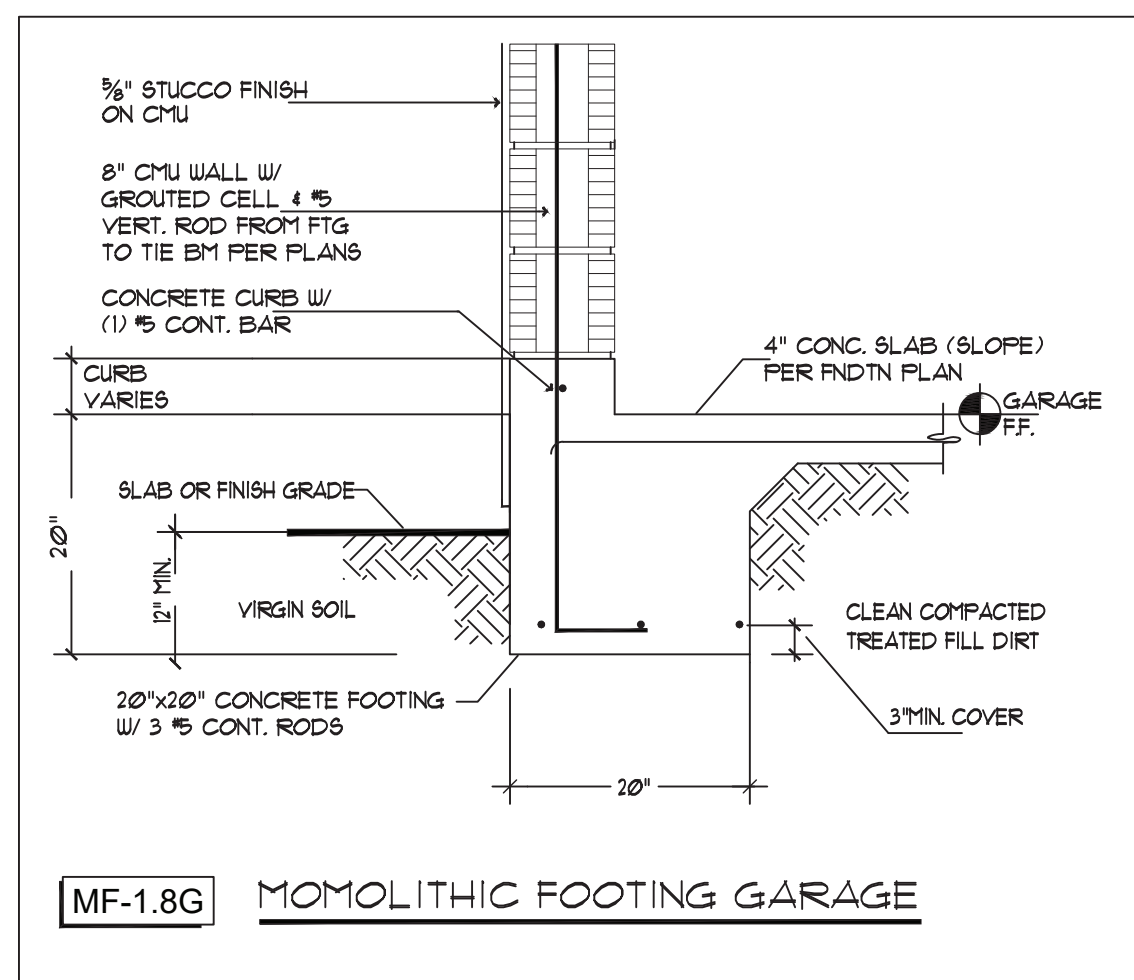
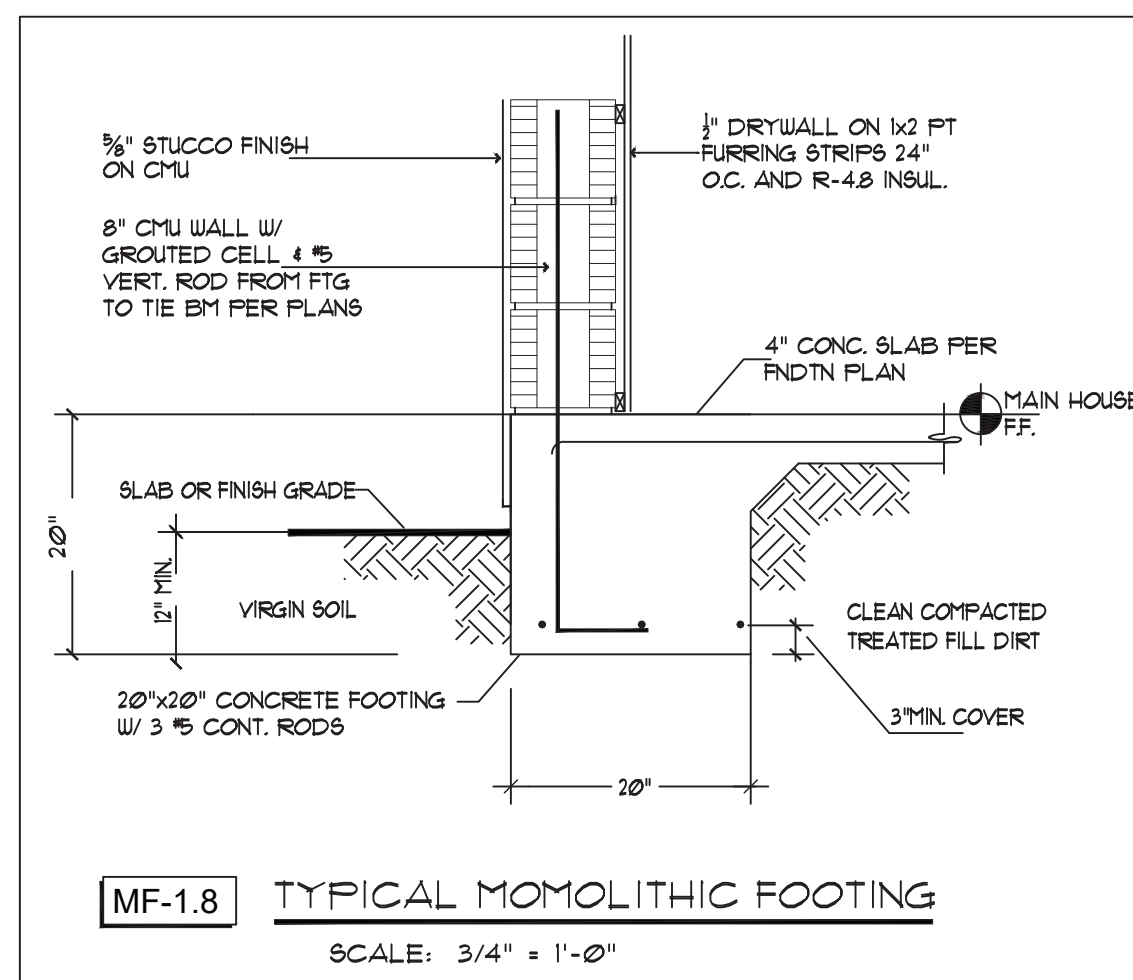
RESIDENTIAL DESIGN
TEL: 407-402-3487
e-mail: ericmlucia@gmail.com

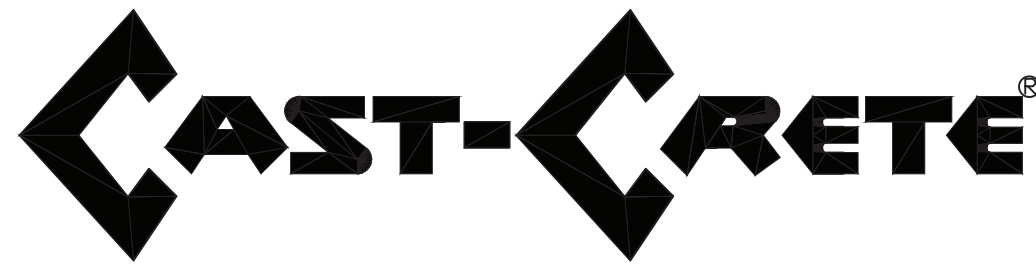
Lucia
DESIGNS

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223 MAGNOLIA CIRCLE CIRCLE
EUSTIS, FLORIDA 32726
352.989.1935
PER: 47617

NEW HOME DESIGN
CASTILLO
JERICHO TRAIL
EUSTIS FLORIDA 32736

DATE: _____
SCALE: NOTED
DRAWN: EML
JOB: _____
SHEET _____
OF 13 SHEETS





SAFE LOAD TABLES

FOR GRAVITY, UPLIFT & LATERAL LOADS

8" PRECAST & PRESTRESSED U-LINTELS

GRAVITY	
LENGTH	TYPE
2'-10" (34") PRECAST	2302
3'-6" (42") PRECAST	2302
4'-0" (48") PRECAST	2029
4'-6" (54") PRECAST	1651
5'-4" (64") PRECAST	1184
5'-10" (70") PRECAST	912
6'-6" (78") PRECAST	937
7'-6" (90") PRECAST	767
9'-4" (112") PRECAST	573
10'-6" (126") PRECAST	456
11'-4" (136") PRECAST	445
12'-0" (144") PRECAST	414
13'-4" (160") PRECAST	362
14'-0" (168") PRECAST	338
14'-8" (176") PRESTRESSED	N.R.
15'-4" (184") PRESTRESSED	N.R.
17'-4" (208") PRESTRESSED	N.R.
19'-4" (232") PRESTRESSED	N.R.
21'-4" (256") PRESTRESSED	N.R.
22'-0" (264") PRESTRESSED	N.R.
24'-0" (288") PRESTRESSED	N.R.

8" PRECAST & PRESTRESSED U-LINTELS

UPLIFT	
LENGTH	TYPE
2'-10" (34") PRECAST	2721
3'-6" (42") PRECAST	2165
4'-0" (48") PRECAST	1818
4'-6" (54") PRECAST	1660
5'-4" (64") PRECAST	1393
5'-10" (70") PRECAST	1272
6'-6" (78") PRECAST	1141
7'-6" (90") PRECAST	999
9'-4" (112") PRECAST	801
10'-6" (126") PRECAST	716
11'-4" (136") PRECAST	666
12'-0" (144") PRECAST	607
13'-4" (160") PRECAST	513
14'-0" (168") PRECAST	488
14'-8" (176") PRESTRESSED	500
15'-4" (184") PRESTRESSED	228
17'-4" (208") PRESTRESSED	188
19'-4" (232") PRESTRESSED	165
21'-4" (256") PRESTRESSED	145
22'-0" (264") PRESTRESSED	142
24'-0" (288") PRESTRESSED	131

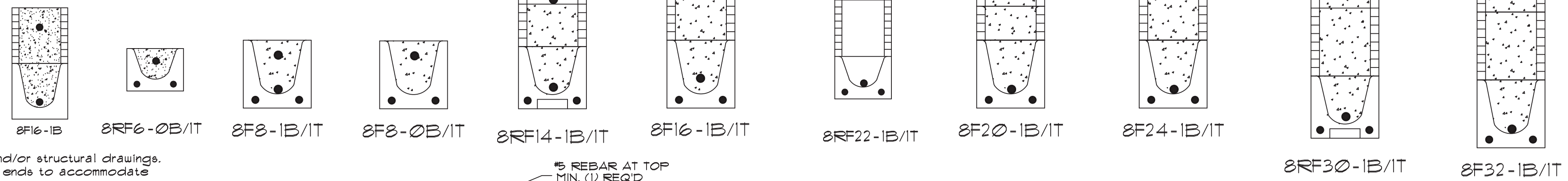
8" PRECAST W/ 2" RECESS DOOR U-LINTELS

GRAVITY	
LENGTH	TYPE
4'-4" (52") PRECAST	1489
4'-6" (54") PRECAST	1357
5'-8" (68") PRECAST	785
5'-10" (70") PRECAST	735
6'-8" (80") PRECAST	822
7'-6" (90") PRECAST	665
9'-8" (116") PRECAST	371

8" PRECAST W/ 2" RECESS DOOR U-LINTELS

UPLIFT	
LENGTH	TYPE
4'-4" (52") PRECAST	1244
4'-6" (54") PRECAST	1192
5'-8" (68") PRECAST	924
5'-10" (70") PRECAST	896
6'-8" (80") PRECAST	778
7'-6" (90") PRECAST	688
9'-8" (116") PRECAST	533

SPECIFIED COMPOSITE LINTEL DEPTH IS THE MINIMUM ACCEPTABLE. ANY EXTRA COURSES OF BLOCK ABOVE LINTEL ARE ACCEPTABLE AS LONG AS ALL COURSES ABOVE P.C. LINTEL ARE FILLED W/ GROUT.



PRE-CAST LINTEL ENGINEERING PER CAST-CRETE.

MATERIALS

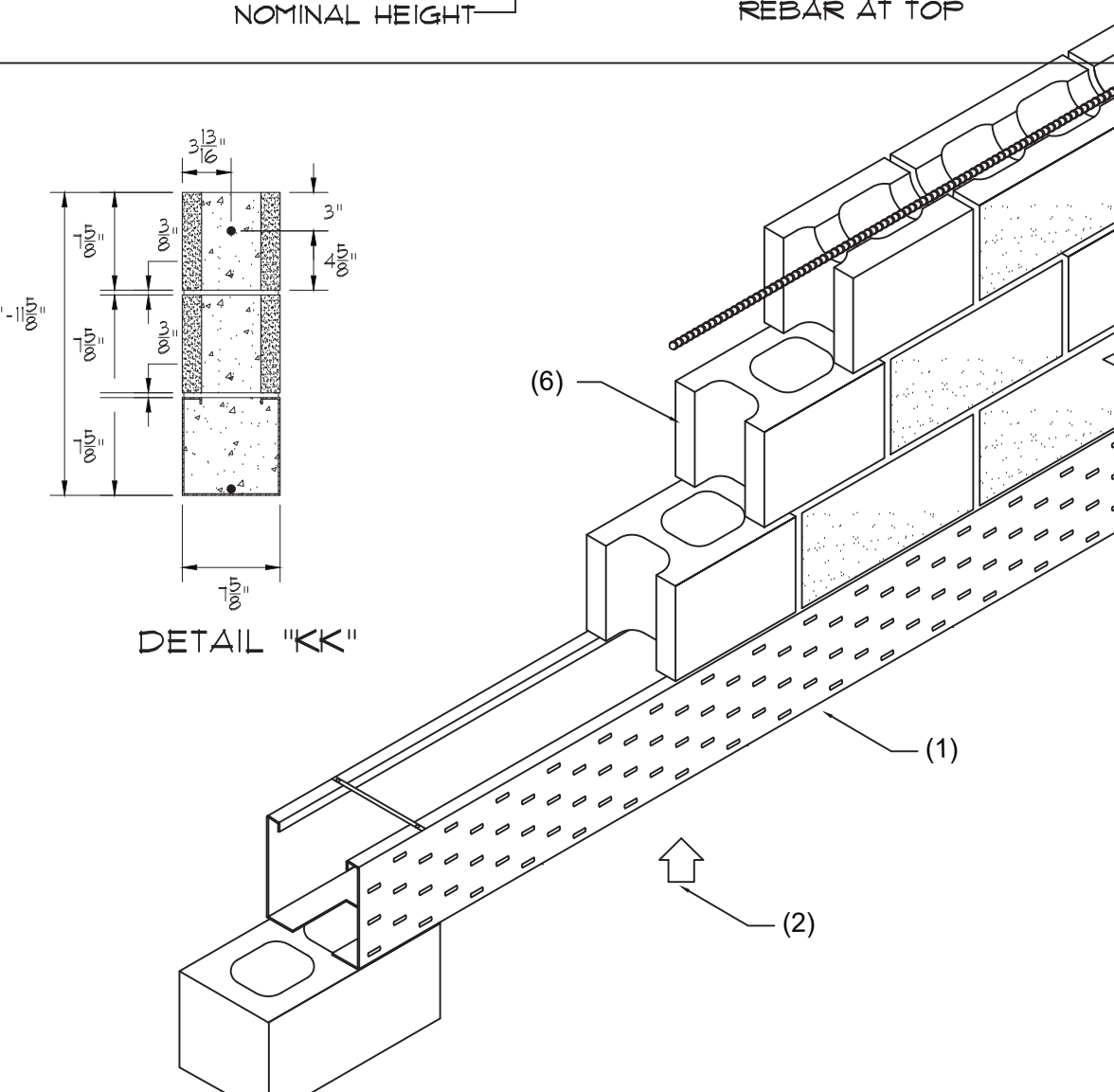
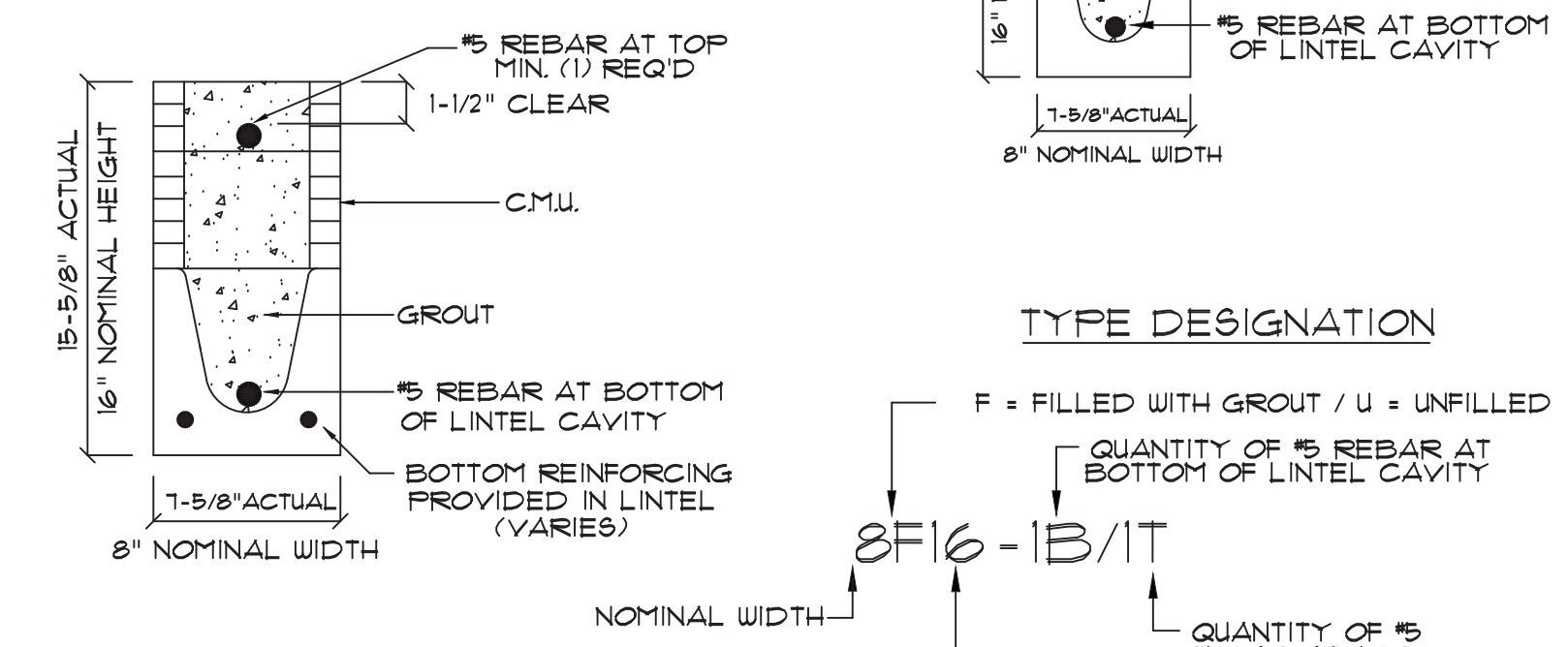
1. P/c precast lintels = 3500 psi.
2. P/c prestressed lintels = 6000 psi.
3. P/c grout = 3000 psi w/ maximum 3/8" aggregate.
4. Concrete masonry units (CMU) per ASTM C90 w/ minimum net area compressive strength = 1900 psi.
5. Rebar provided in precast lintel per ASTM A615 GR60. Field rebar per ASTM A615 GR40 or GR60.
6. Prestressing strand per ASTM A416 grade 270 low relaxation.
7. 1/32 wire per ASTM A310.
8. Mortar per ASTM C270 type M or S.

GENERAL NOTES

1. Provide full mortar head and bed joints.
2. Shore filled lintels as required.
3. Installation of lintel must comply with the architectural and/or structural drawings.
4. Lintels are manufactured with 5-1/2" long notches at the ends to accommodate vertical cell reinforcing and grouting.
5. All lintels meet or exceed L/360 vertical deflection, except lintels 17'-4" and longer with a nominal height of 8" meet or exceed L/180.
6. Bottom field added rebar to be located at the bottom of the lintel cavity.
7. 1/32" diameter wire stirrups are welded to the bottom steel for mechanical anchorage.
8. Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.
9. Safe load ratings based on rational design analysis per ACI 318 and ACI 530

SAFE LOAD TABLE NOTES

1. All values based on minimum 4" bearing. Exception: Safe loads for unfilled lintels must be reduced by 20% if bearing length is less than 6'-1/2". Safe loads for all recessed lintels based on 8" nominal bearing.
2. N.R. = Not Rated.
3. Safe loads are total superimposed allowable load on the section specified.
4. Safe loads based on grade 40 or grade 60 field rebar.
5. Additional lateral load capacity can be obtained by the designer by providing additional reinforced masonry above the precast lintel.
6. One #1 rebar may be substituted for two #5 rebars in 8" lintels only.
7. The designer may evaluate concentrated loads from the safe load tables by calculating the maximum resisting moment and shear at a distance from the face of support.
8. For composite lintel heights not shown, use safe load from next lower height.
9. All safe loads in units of pounds per linear foot.



POWER STEEL BOX AND WIRE LINTELS

POWER LINTEL P8box8 (7-5/8") 24" COMPOSITE

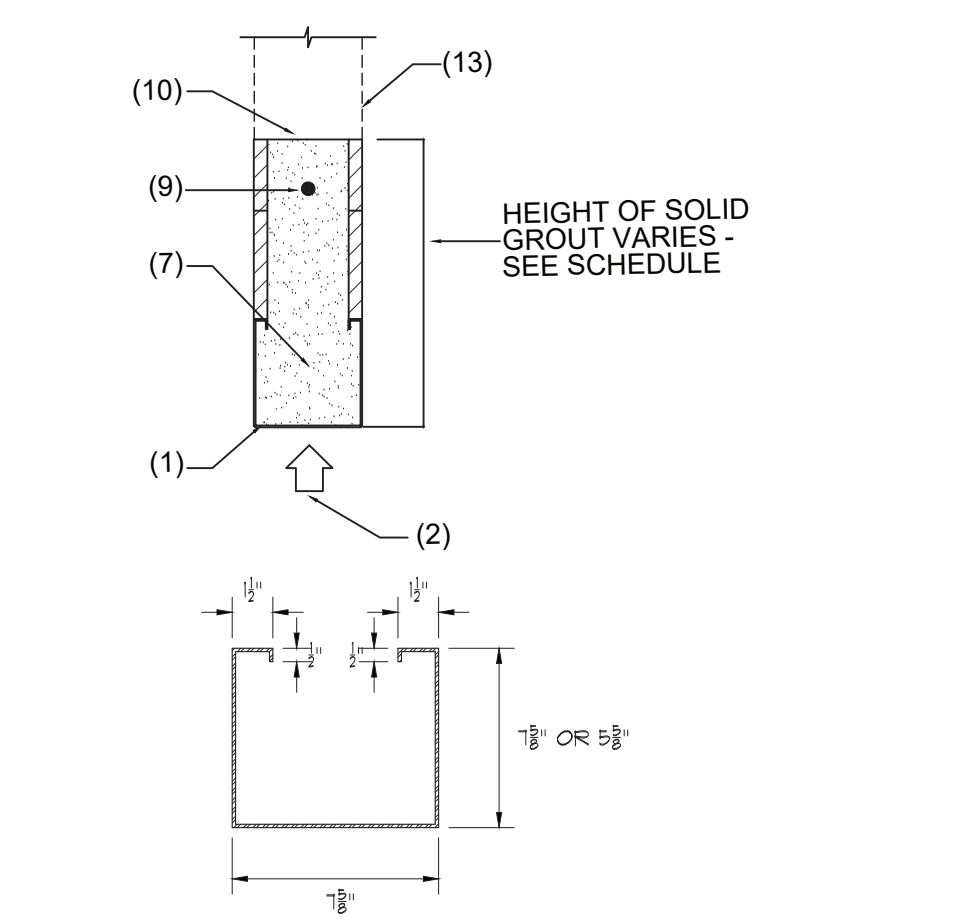
MARK NO.	NOMINAL CLEAR SPAN	TOTAL LINTEL LENGTH	FILLED W/ #5 TOP DETAIL "K"	FILLED W/ #5 TB DETAIL "KK"
L-1	1'-6"	2'-10"	--	--
L-2	2'-2"	3'-6"	--	--
L-3	2'-8"	4'-0"	--	--
L-4	3'-2"	4'-6"	6746	6746
L-5	4'-0"	5'-4"	5305	5305
L-6	4'-6"	5'-10"	4636	4636
L-7	5'-2"	6'-6"	4068	4068
L-8	6'-2"	7'-6"	3380	3380
L-9	7'-0"	8'-4"	2957	2957
L-10	8'-0"	9'-4"	2566	2566
L-11	9'-2"	10'-6"	2218	2218
L-12	10'-0"	11'-4"	2019	2019
L-13	11'-2"	12'-6"	1790	1790
L-14	12'-0"	13'-4"	1653	1653
L-15	12'-8"	14'-0"	1551	1551
L-16	13'-4"	14'-8"	1471	1471
L-17	14'-0"	15'-4"	1393	1393
L-18	16'-0"	17'-4"	1197	1197
L-19	18'-0"	19'-4"	1201	1336
L-20	18'-8"	20'-0"	1104	1282
L-21	20'-8"	22'-0"	869	1037
L-22	22'-8"	24'-0"	693	892
L-23	24'-0"	25'-0"	675	918
L-24	26'-0"	27'-4"	507	757
L-25	28'-0"	29'-4"	413	679
L-26	30'-0"	31'-4"	337	575

NOTE: ALL LINTELS GREATER THAN 22'-0" IN LENGTH WILL REQUIRE (2) #5 BARS TOP OR (2) #5 BARS TOP & BOTTOM

POWER LINTEL P8box8 (7-5/8") 24" COMPOSITE

MARK NO.	NOMINAL CLEAR SPAN	TOTAL LINTEL LENGTH	FILLED W/ #5 TOP DETAIL "K"	FILLED W/ #5 TB DETAIL "KK"
L-1	1'-6"	2'-10"	--	--
L-2	2'-2"	3'-6"	9645	9645
L-3	2'-8"	4'-0"	7856	7856
L-4	3'-2"	4'-6"	6632	6632
L-5	4'-0"	5'-4"	5712	5712
L-6	4'-6"	5'-10"	4938	4938
L-7	5'-2"	6'-6"	4105	4105
L-8	6'-2"	7'-6"	3456	3456
L-9	7'-0"	8'-4"	3057	3057
L-10	8'-0"	9'-4"	2459	2459
L-11	9'-2"	10'-6"	1897	1897
L-12	10'-0"	11'-4"	1611	1611
L-13	11'-2"	12'-6"	1312	1312
L-14	12'-0"	13'-4"	1150	1150
L-15	12'-8"	14'-0"	1043	1043
L-16	13'-4"	14'-8"	951	951
L-17	14'-0"	15'-4"	872	872
L-18	16'-0"	17'-4"	692	692
L-19	18'-0"	19'-4"	618	618
L-20	18'-8"	20'-0"	582	582
L-21	20'-8"	22'-0"	494	494
L-22	22'-8"	24'-0"	428	428
L-23	24'-0"	25'-0"	511	511
L-24	26'-0"	27'-4"	507	507
L-25	28'-0"	29'-4"	452	452
L-26	30'-0"	31'-4"	407	407

NOTE: ALL LINTELS GREATER THAN 22'-0" IN LENGTH WILL REQUIRE (2) #5 BARS TOP OR (2) #5 BARS TOP & BOTTOM



TYPICAL POWER BOX LINTEL SECTION

REVISIONS	BY

RESIDENTIAL DESIGN
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e-mail: ericmclucia@gmail.com
DESIGNS

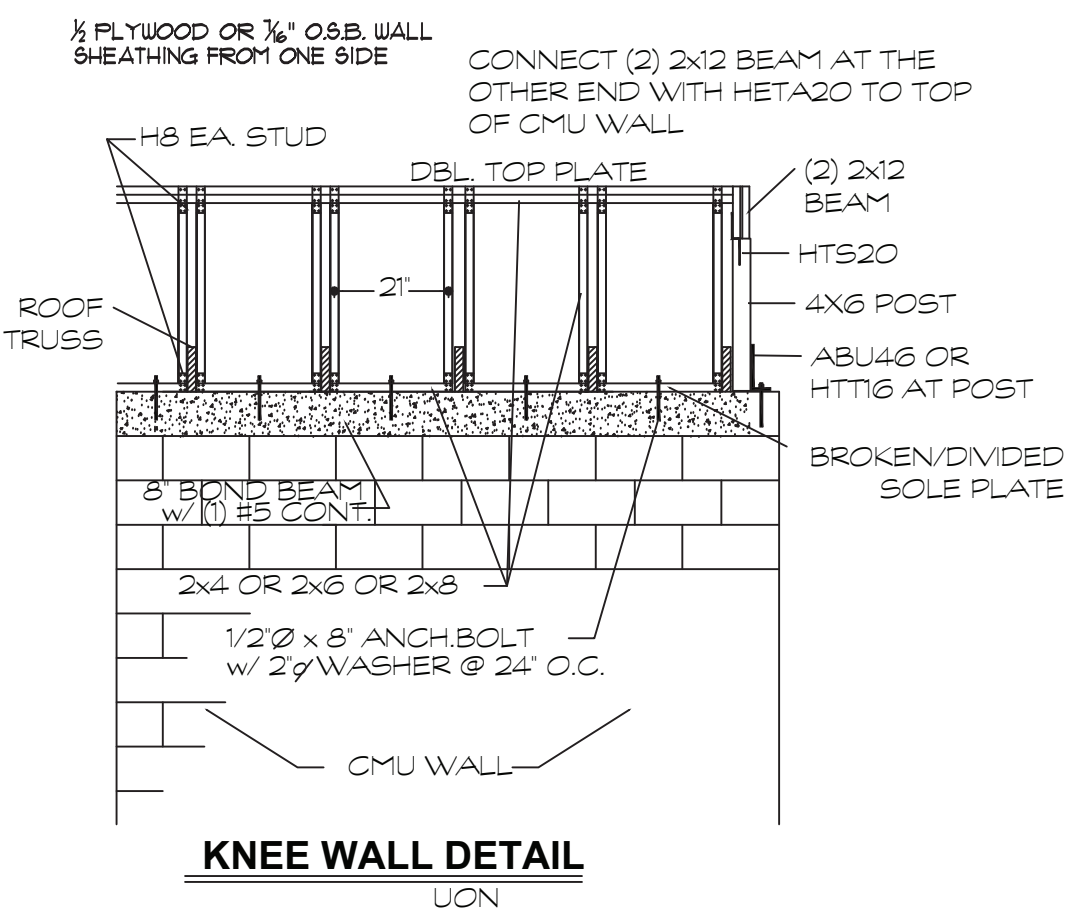
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223 MAGNOLIA CIRCLE CIRCLE
EUSTIS, FLORIDA 32726
352.989.1935
PER: 47617

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REVISIONS	BY

LIMITING HEIGHTS OF 2" STUDS	
FOR HIGH FRAMING CONDITIONS, THE APPLICATION OR CONNECTION OF AN INTERMEDIATE FRAMING SUCH AS FLOOR JOISTS, CEILING JOISTS, ETC., ALLOW TO REDUCE THE ALLOWABLE HEIGHT FOR STUDS	
SIZE STUD MATERIAL, AT O.C. SPACING	MAXIMUM HEIGHT
2x4 SPRUCE, FR 24' O.C.	8'-0"
2x4 SPRUCE, FR 16' O.C.	9'-0"
2x4 SPRUCE, FR 12' O.C.	10'-0"
2x4 SOUTHERN PINE, FR 24' O.C.	9'-0"
2x4 SOUTHERN PINE, FR 16' O.C.	10'-3"
2x4 SOUTHERN PINE, FR 12' O.C.	12'-4"
2x6 SPRUCE, FR 24' O.C.	11'-4"
2x6 SPRUCE, FR 16' O.C.	13'-3"
2x6 SPRUCE, FR 12' O.C.	16'-0"
2x6 SOUTHERN PINE, FR 24' O.C.	13'-3"
2x6 SOUTHERN PINE, FR 16' O.C.	17'-0"
2x6 SOUTHERN PINE, FR 12' O.C.	19'-4"
2x8 SPRUCE, FR 24' O.C.	14'-3"
2x8 SPRUCE, FR 16' O.C.	18'-0"
2x8 SPRUCE, FR 12' O.C.	21'-0"
2x8 SOUTHERN PINE, FR 24' O.C.	18'-0"
2x8 SOUTHERN PINE, FR 16' O.C.	22'-3"
2x8 SOUTHERN PINE, FR 12' O.C.	25'-8"



2x STUD CONT. TO TOP PLATE

16d SPIKES @ 12" TOP PLATE

2-2x STUDS UNDER LINTELS W/ OPENINGS LESS THAN 5'-0"

HEADER CONT. GLUE 4 NAILED USING 1/2" PLYWD. FLITCH

OPENING WIDTH	BEARING WALL OR SHEARWALL	NON-BEARING WALLS
0'-0" TO 3'-0"	2-2x8S + PLYWD. FLITCH	2-2x4S
3'-1" TO 5'-0"	2-2x10S + PLYWD. FLITCH	2-2x4S
5'-1" TO 7'-0"	2-2x12S + PLYWD. FLITCH	2-2x6S
7'-1" TO 9'-0"	2-2x12 W/ 1/2" PLYWD. FLITCH	2-2x8S

MINIMUM WALL AND HEADER STUD REQUIREMENTS

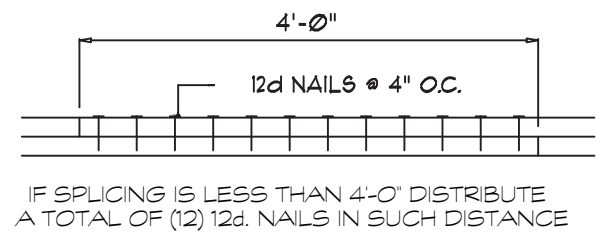
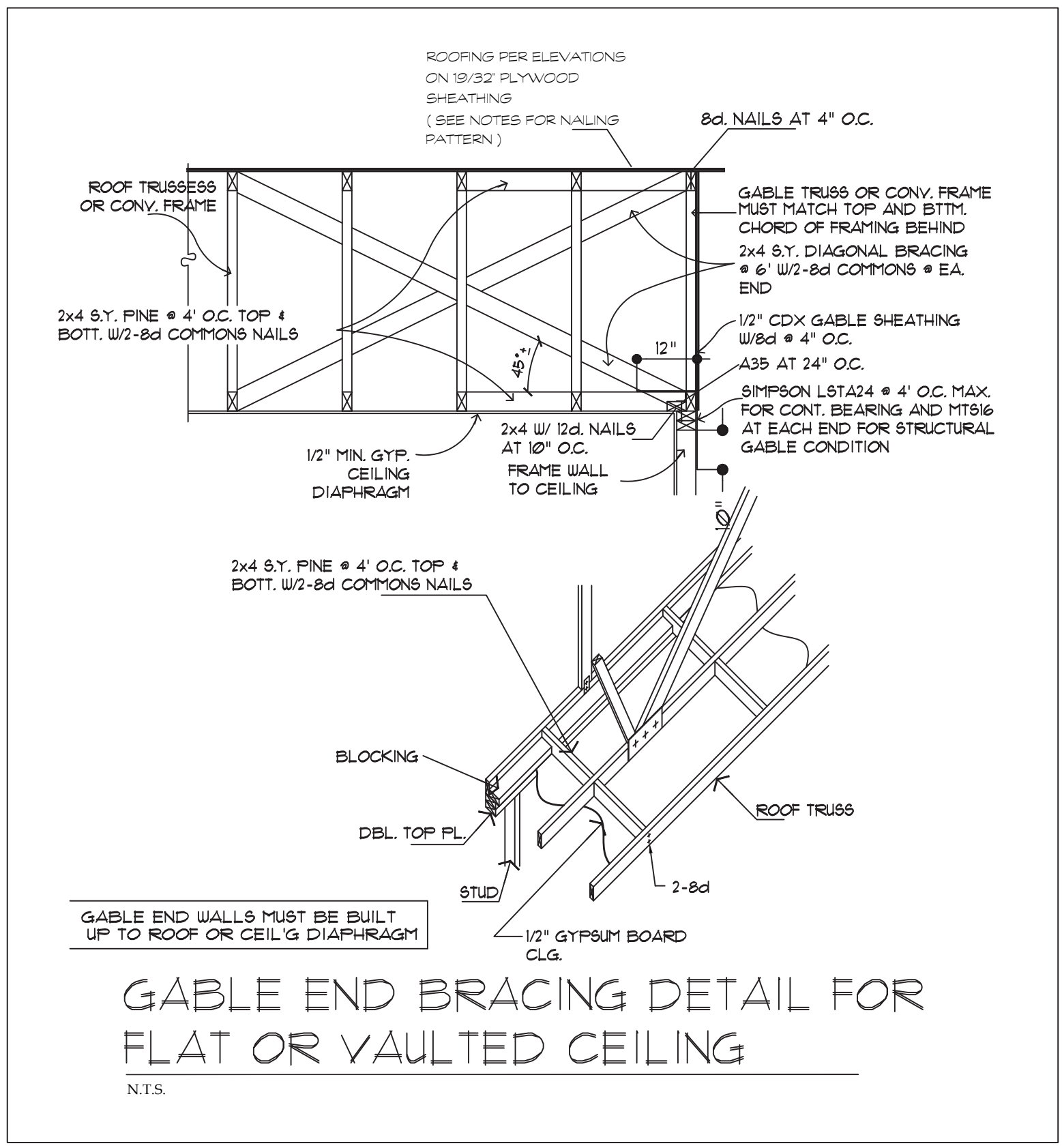
UPLIFT CONNECTION REQUIREMENT AT POINTS (A) TOP AND BOTTOM OF HEADER STUDS. UPLIFT CONNECTION IS REQUIRED AT EACH END OF HEADER AND AT BOTTOM OF HEADER STUDS IN ADDITION TO CONNECTORS AT WALL STUDS

UNSUPPORTED WALL HEIGHT	STUD SPACING	MAXIMUM HEADER SPAN(FEET)					
		3	6	9	12	15	18
10' OR LESS	12"	2	2	3	3	3	3
	16"	2	2	3	3	3	3
GREATER THAN 10'	12"	2	2	2	2	3	3
	16"	2	2	2	2	3	3

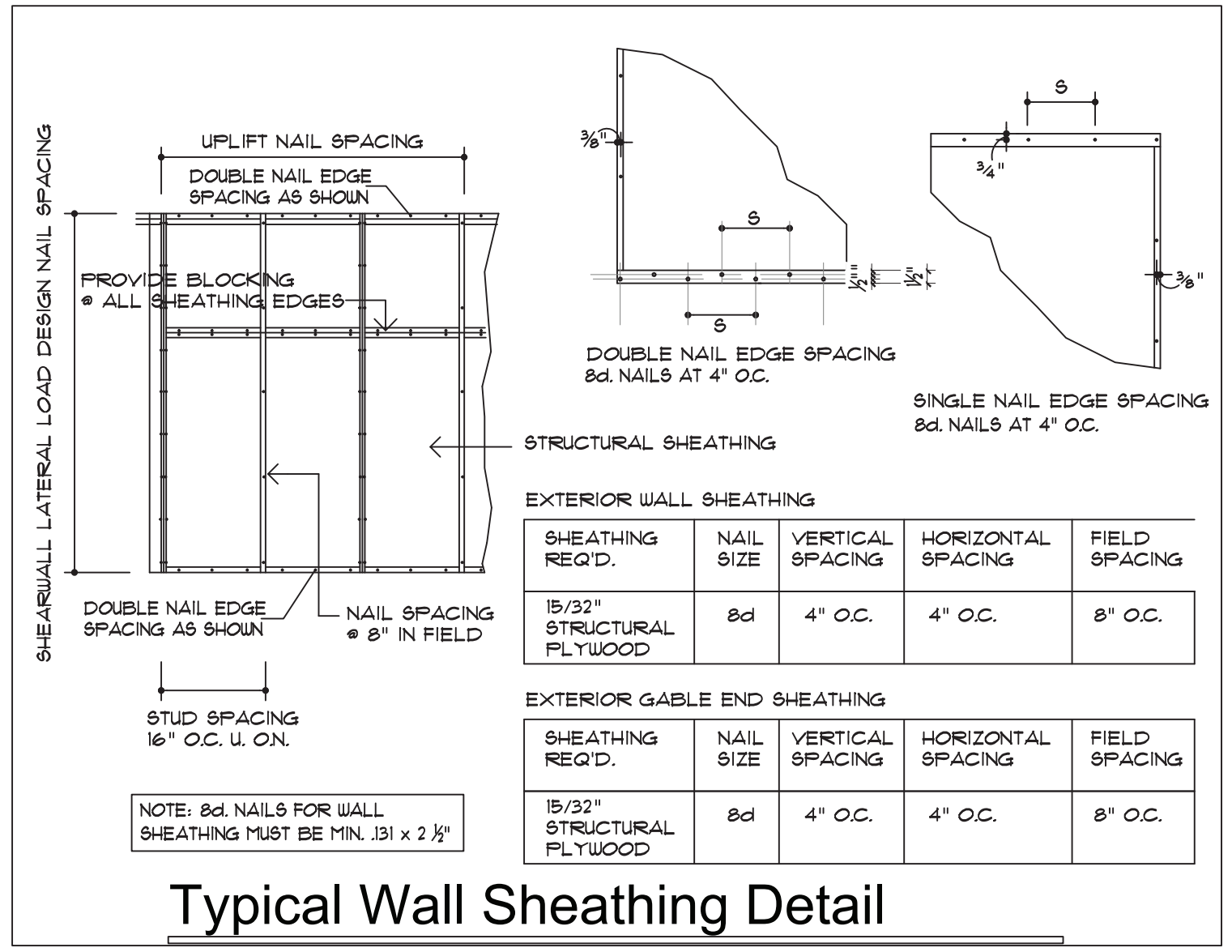
*THE HEADER STUD SHALL NOT BE REQUIRED IF THE HEADER IS SUPPORTED BY A SUITABLE FRAMING ANCHOR

OPENING WIDTH	BEARING WALL OR SHEARWALL	NON-BEARING WALLS
0'-0" TO 3'-0"	3-2x10S + PLYWD. FLITCH	3-2x4S
3'-1" TO 5'-0"	3-2x12S + PLYWD. FLITCH	3-2x6S
5'-1" TO 7'-0"	3-1 1/2" LVL	3-2x8S
7'-1" TO 9'-0"	3-1 1/2" LVL	3-2x10S

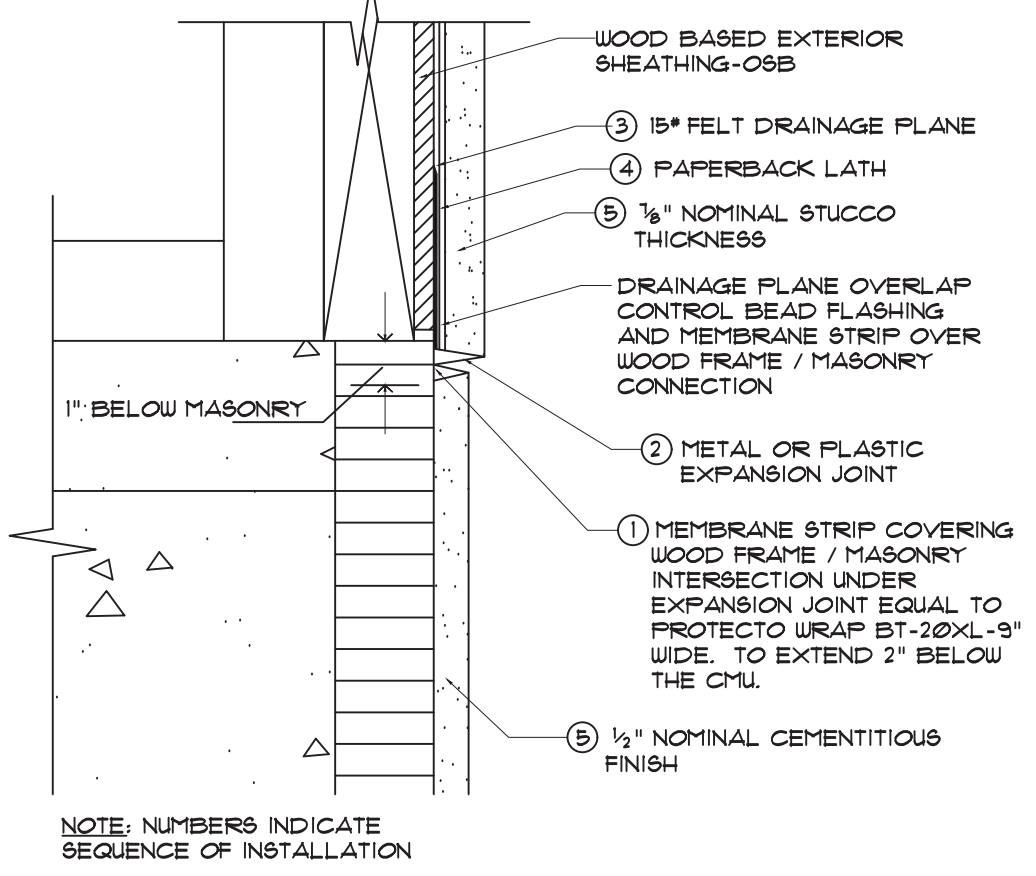
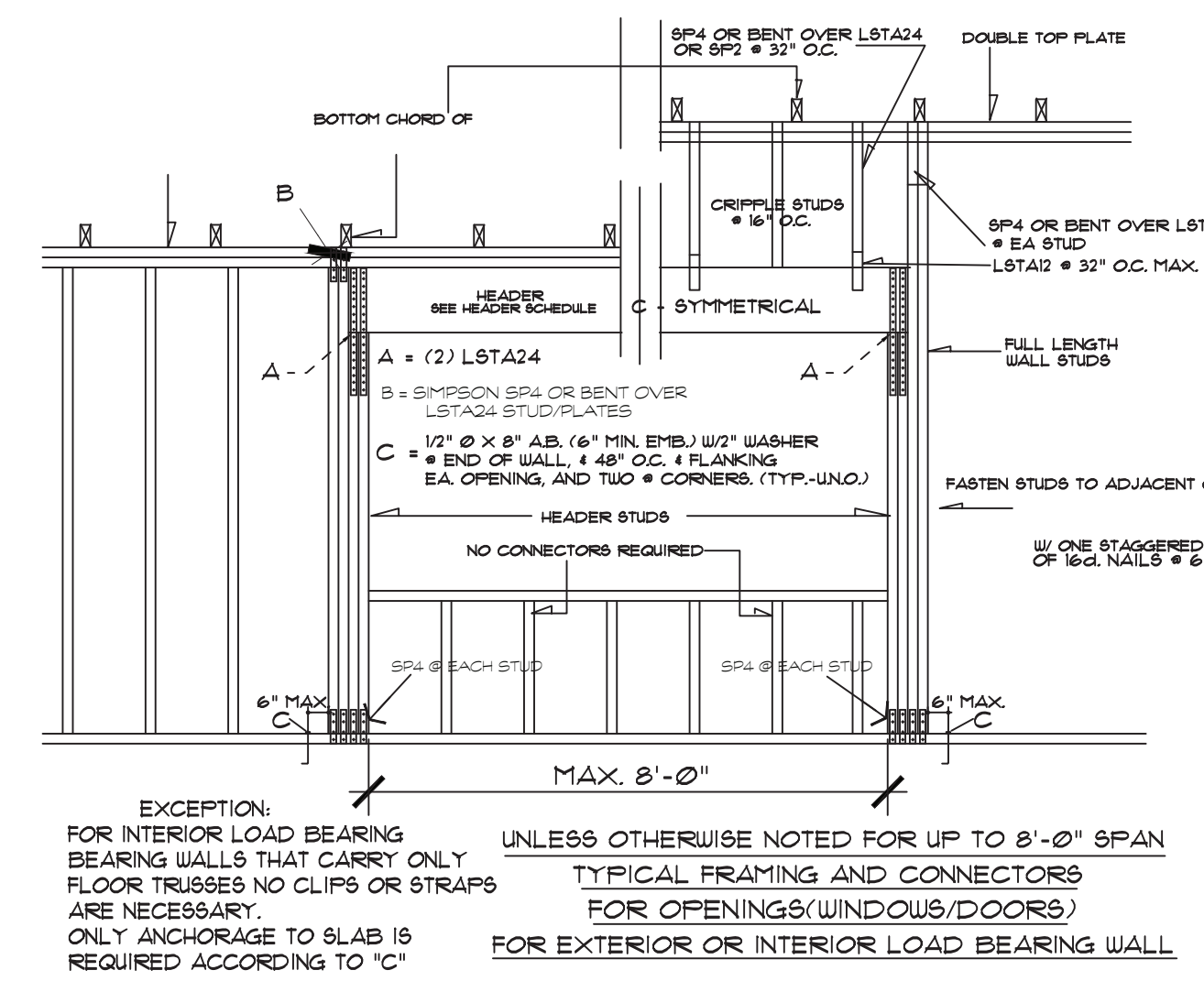
- USE HEADER SIZES ABOVE UNLESS OTHERWISE NOTED ON FRAMING PLAN
- PRIMARY FRAMING (BEAMS, GIRDERS, ETC.) WERE SIZED USING 1800' FB' EXTREME FIBER IN BENDING (SINGLE) 90' FV' HORIZONTAL SHEAR 16E' E' MODULES OF ELASTICITY
- JOIST, RAFTERS, LINTELS, ETC. WERE SIZED USING: 1200' FB' EXTREME FIBER IN BENDING (SINGLE) 90' FV' HORIZONTAL SHEAR 16E' E' MODULES OF ELASTICITY



Top Plate Splice Detail



Typical Wall Sheathing Detail



STUCCO FLASHING DETAIL @ CMU / FRAME INTERFACE

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