STRUCTURAL REQUIREMENTS

REINFORCED CONCRETE

1. STRUCTURAL CONCRETE SHALL COMPLY WITH THE MOST RESTRICTIVE REQUIREMENTS ACCORDING TO ACI 318 TABLE 4.3.1 FOR THE EXPOSURE CATEGORIES AND CLASSES LISTED BELOW.

STRUCT. MEMBER	EXPOSURE CATEGORY AND CLASS	
FOOTINGS	F, FREEZING & THAWING:	F0 - NEGLIGIBLE
WALLS	S, SULFATE:	S2 - SEVERE
	W, IN CONTACT W/ WATER:	W0 - NOT APPLICABLE
	C, CORROSION PROT. OF REINF.:	C0 - NOT APPLICABLE

2. MINIMUM CONCRETE MIX REQUIREMENTS:
   CONCRETE COMPRESSIVE STRENGTH, f'c: 4500 PSI.
   MAXIMUM WATER TO CEMENT RATIO: 0.45
   CEMENTITIOUS MATERIAL: TYPE V
3. STRUCTURAL CONCRETE SHALL REACH A MINIMUM 3-DAY COMPRESSIVE STRENGTH OF 1500 PSI AND SHALL REACH THE SPECIFIED COMPRESSIVE STRENGTH IN 28 DAYS. CONCRETE COMPRESSIVE TESTS SHALL CONFORM TO ASTM C 140 "TEST METHOD SAMPLING AND TESTING CONCRETE MASONRY UNITS AND RELATED UNITS". CEMENTITIOUS MATERIAL SHALL CONFORM TO ASTM C 150 "SPECIFICATION FOR PORTLAND CEMENT".
4. THE CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 4 INCHES OR LESS. A TOLERANCE OF 1 INCH ABOVE THIS AMOUNT SHALL BE PERMITTED FOR INDIVIDUAL BATCHES PROVIDED THE AVERAGE FOR ALL BATCHES DOES NOT EXCEED 4 INCHES. THE SLUMP SHALL BE DETERMINED BY "STANDARD TESTING METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE" (ASTM C 143). WHERE A SUPERPLASTICIZER ADMIXTURE IS USED, MAXIMUM SLUMP IS ALLOWED TO BE INCREASED 1-1/2" FOR EACH 1% OF SUPERPLASTICIZER UP TO A MAXIMUM INCREASE OF 3".
5. WATER USED IN MIXING CONCRETE SHALL BE CLEAN FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS, OR OTHER SUBSTANCES DELETERIOUS TO CONCRETE OR REINFORCEMENT. NONPOTABLE WATER SHALL NOT BE USED.
6. CONCRETE AGGREGATES SHALL CONFORM TO ASTM C 33 "STANDARD SPECIFICATIONS FOR CONCRETE AGGREGATES" OR ASTM C 330 "STANDARD SPECIFICATION FOR LIGHTWEIGHT AGGREGATES". THE NORMAL MAXIMUM SIZE OF COARSE AGGREGATES SHALL NOT BE LARGER THAN: 1/5 THE DISTANCE BETWEEN THE SIDES OF FORMS, 1/3 THE SLAB DEPTH, OR 3/4 THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, BUNDLES OF BARS, INDIVIDUAL TENDONS, OR DUCTS.
7. DEFORMED CONCRETE REINFORCING SHALL BE GRADE 60 REINFORCING STEEL CONFORMING TO ASTM A 615 "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN CARBON-STEEL BARS FOR CONCRETE REINFORCEMENT.
8. BAR MATS FOR CONCRETE REINFORCING SHALL CONFORM TO ASTM A 184 "STANDARD SPECIFICATION FOR WELDED DEFORMED STELL BAR MATS FOR CONCRETE REINFORCEMENT. REINFORCING BARS USED IN BAR MATS SHALL CONFORM TO ASTM A 515 OR ASTM A 706.
9. WELDED PLAIN WIRE FOR CONCRETE REINFORCEMENT SHALL NOT BE SMALLER THAN D4 AND SHALL CONFORM TO ASTM A 496 "STANDARD SPECIFICATION FOR STEEL WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT". WELDED DEFORMED WIRE FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A 497 "STANDARD SPECIFICATION FOR STEEL WELDED WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT".
10. WELDED WIRE FOR CONCRETE REINFORCEMENT SHALL NOT BE SMALLER THAN D4 AND SHALL CONFORM TO ASTM A 496 "STANDARD SPECIFICATION FOR STEEL WIRE, DEFORMED, FOR CONCRETE REINFORCEMENT".
11. NO ADMIXTURES, OTHER THAN AIR-ENTRAINING ADMIXTURE CONFORMING ASTM C 260 OR SUPERPLASTICIZER ADMIXTURE CONFORMING TO ASTM C 494 MAY BE USED WITHOUT THE WRITTEN APPROVAL FROM THE ENGINEER. CALCIUM CHLORIDE AND CONCRETE ADMIXTURES CONTAINING CHLORIDE SALTS ARE NOT PERMITTED.
12. ALL REINFORCING LAP SPLICES SHALL BE CLASS 'B' SPLICES UNLESS NOTED OTHERWISE. LAP ALL REINFORCING BARS ACCORDING TO THE FOLLOWING LAP SPLICE SCHEDULE. WHERE BEAM REINFORCING IS REQUIRED TO BE SPLICED, SPLICING SHALL ONLY TAKE PLACE IN COMPRESSION REGIONS, I.E. BOTTOM REINFORCING SPLICES ALLOWED OVER SUPPORTS AND TOP REINFORCING SPLICES ALLOWED IN THE BEAM MIDSPANS. WHERE COLUMN VERTICAL REINFORCING IS REQUIRED TO BE SPLICED, SPLICING WILL BE PERMITTED ONLY AT FLOOR LEVELS OR AREAS OF LATERAL SUPPORT.

REINFORCED CONCRETE LAP SPLICE SCHEDULE

F'c = 2500 PSI AT 28 DAYS		REINFORCEMENT LENGTH (INCHES)					
SPLICE CLASS	REINFORCEMENT LOCATION	#3 BARS	#4 BARS	#5 BARS	#6 BARS	#7 BARS	#8 BARS
A	TOP*	24	32	39	47	69	78
	BOTTOM	18	24	30	36	53	60
B	TOP*	31	41	51	61	89	102
	BOTTOM	24	32	39	47	69	78

*TOP DENOTES HORIZONTAL REINFORCING W/ 12" OF FRESH CONCRETE BELOW THE LEVEL OF REINFORCING

WOOD FRAMING

1. ALL DIMENSIONAL LUMBER SHALL BE DF#2 GRADE OR BETTER. SAWN LUMBER SHALL BE IDENTIFIED BY THE GRADE MARK OF A LUMBER GRADING OR INSPECTION AGENCY THAT HAS BEEN APPROVED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20 OR EQUIVALENT.
2. ALL SHEATHING TO BE APA RATED SHEATHING EXPOSURE 1 AND SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN DOC PS 1 OR PS 2. ALL EXTERIOR WALL ARE REQUIRED TO BE SHEATHED. ALL SHEATHING SHALL HAVE SPAN RATINGS ACCORDING TO THE FOLLOWING:
   FLOOR W/ 12" JOIST/TRUSS SPACING.....24/12
   FLOOR W/ 16" JOIST/TRUSS SPACING.....32/16
   FLOOR W/ 24" JOIST/TRUSS SPACING.....48/24
   ROOF W/ 12" JOIST/TRUSS SPACING.....12/0
   ROOF W/ 24" JOIST/TRUSS SPACING.....24/0
   ROOF W/ 48" JOIST/TRUSS SPACING.....48/24
   WALL W/ 12" STUD SPACING.....16/0
   WALL W/ 16" STUD SPACING.....24/0
3. ALL LUMBER, TIMBER, PLYWOOD, REQUIRED TO BE TREATED SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE AWPA STANDARD U1 AND M4 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVE TREATED WOOD SHALL BEAR THE QUALITY MARK OF AN INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING, AND INSPECTION OVER THE QUALITY OF THE PRESERVATIVE TREATED WOOD.
4. THE FOLLOWING SHALL BE PRESERVATIVE TREATED LUMBER OR REDWOOD:
   A. ALL WALL SILL PLATES ON A CONCRETE SLAB THAT ARE IN DIRECT CONTACT WITH EARTH.
   B. WOOD FRAMING MEMBERS THAT REST ON EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM EXPOSED EARTH.
   C. WOOD FRAMING MEMBERS AND FURRING STRIPS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE.
   D. WOOD JOISTS THAT ARE CLOSER THAN 18", OR WOOD GIRDERS THAT ARE CLOSER THAN 12" FROM EXPOSED EARTH IN CRAWL SPACES OR UNEXCAVATED AREA'S LOCATED WITHIN THE PERIMETER OF THE BUILDING FOUNDATION.
5. PREFABRICATED I-JOISTS SHALL CONFORM TO ASTM D 5055.
6. LAMINATED VENEER LUMBER (LVL) SHALL BE 1-3/4" WIDE 1.9E WITH AN ALLOWABLE BENDING STRESS OF 2,600 PSI AND AN ALLOWABLE SHEAR STRESS OF 285 PSI. LAMINATED STRAND LUMBER (LSL) SHALL BE 1-3/4" WIDE 1.55E WITH AN ALLOWABLE BENDING STRESS OF 2,325 PSI AND AN ALLOWABLE SHEAR STRESS OF 310 PSI.
7. STRUCTURAL GLUE LAMINATED TIMBER SHALL BE 24F-V4 DF UNLESS NOTED OTHERWISE AND MANUFACTURED AND IDENTIFIED AS REQUIRED IN AITC A190.1 AND ASTM D 3737.
8. PROVIDE SOLID BLOCKING FOR ALL VERTICAL LOAD PATHS TO FOUNDATION.
9. PROVIDE 1 TRIMMER ON EACH SIDE OF ALL OPENINGS LESS THAN 4'-0" WIDE. PROVIDE 2 TRIMMERS MIN. ON EACH SIDE OF ALL OPENINGS 4'-0" WIDE AND GREATER. A MINIMUM 2 STUDS SHALL BE PROVIDED AT ALL VERTICAL EDGES OF SHEAR WALLS, GIRDER TRUSSES, AND BEAMS UNLESS NOTED OTHERWISE.
10. OPENINGS SHALL BE FRAMED WITH THE MINIMUM KING STUDS UNLESS NOTED OTHERWISE:
    OPENINGS UP TO 2'-0": (1) 2X4 OR (1) 2X6 KING STUD AT EACH SIDE OF OPENING
    OPENINGS UP TO 6'-0": (2) 2X4 OR (1) 2X6 KING STUDS AT EACH SIDE OF OPENING
    OPENINGS UP TO 10'-0": (3) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
    OPENINGS UP TO 14'-0": (4) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
    OPENINGS UP TO 18'-0": (5) 2X4 OR (2) 2X6 KING STUDS AT EACH SIDE OF OPENING
11. BUILT UP BEAMS SHALL BE FASTENED ACCORDING TO THE FOLLOWING:
    (2) & (3) PLY MEMBERS WITH PLIES UP TO 1-3/4" THICK:
    12" DEEP BEAMS: (2) ROWS OF 16d COMMON NAILS AT 12" O.C.
    14" AND DEEPER: (3) ROWS OF 16d COMMON NAILSAT 12" O.C.
    *NAILED CONNECTIONS REQUIRE AN ADDITIONAL ROW OF NAILS WHEN NAIL SIZE IS SMALLER THAN SPECIFIED ABOVE.
    (4) PLY MEMBERS WITH PLIES UP TO 1-3/4" THICK AND (2) PLY MEMBERS WITH PLIES 3-1/2" THICK:
    12" DEEP BEAMS: (2) STAGGERED ROWS OF 1/2"Ø A307 BOLTS W/ WASHERS @ 16" O.C.
    14" AND DEEPER: (3) STAGGERED ROWS OF 1/2"Ø A307 BOLTS W/ WASHERS @ 16" O.C.
12. STUDS OF BUILT UP COLUMNS SHALL BE NAILED TO ADJACENT STUDS W/ (2) ROWS OF 16d COMMON NAILS @ 6" O.C. UNLESS NOTED OTHERWISE.
13. SIMPSON H1 IS REQUIRED AT EACH END EACH ROOF TRUSS UNLESS NOTED OTHERWISE. NAIL TJI'S TO TOP PLATE W/ (1) 8d BOX NAIL EACH SIDE. DRIVE NAILS AT AN ANGLE AT LEAST 1-1/2" FROM END OF EACH FLOOR JOIST.
14. PROVIDE 1 1/8" WIDE TIMBER STRAND OR EQUIVALENT FOR ALL RIM JOISTS.
15. BEARING, SHEAR AND EXTERIOR WALL STUDS SHALL BE CAPPED WITH DOUBLE TOP PLATES INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 48".
16. DOUBLE TOP PLATES SHALL BE NAILED WITH 16d NAILS @ 16" O.C. A MINIMUM OF 8-16d NAILS SHALL BE PLACED EACH SIDE OF TOP PLATE SPLICES UNLESS NOTED OTHERWISE.
17. NON BEARING INTERIOR PARTITION WALLS SHALL BE FRAMED A MINIMUM OF 1/2" SHORTER THAN BEARING WALLS TO ACCOMMODATE TRUSS DEFLECTION AND PRESERVE THE INTENDED LOAD PATH.
18. PROVIDE BLOCKING BETWEEN ENGINEERED TRUSSES AND JOISTS AS SPECIFIED BY THE MANUFACTURER.
19. JOISTS WITH CANTILEVERS LARGER THAN 1'-6" AND WITHOUT A DIRECT APPLIED CEILING SHALL HAVE CONTINUOUS BLOCKING INSTALLED AT THE 1/3 POINTS OF THE BACK SPAN UNLESS NOTED OTHERWISE.
20. FLOOR JOISTS SPANNING 16'-0" OR MORE WITHOUT A DIRECT APPLIED CEILING SHALL HAVE ROWS OF CONTINUOUS BLOCKING INSTALLED AT A MAXIMUM SPACING OF 8'-0" O.C.
21. PARTITION WALLS THAT ARE PARALLEL WITH FLOOR JOISTS SHALL BE SUPPORTED WITH DOUBLE JOISTS OR CROSS BLOCKING BETWEEN THE TWO CLOSEST ADJACENT JOISTS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
22. ALL METAL HARDWARE TO BE SIMPSON STRONG TIE OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURERS REQUIREMENTS.
23. HOLES FOR BOLTS SHALL BE DRILLED AT THE SAME NOMINAL DIAMETER OF THE BOLT +1/16".
24. HOLES FOR LAG SCREWS AND WOOD SCREWS SHALL BE DRILLED THE SAME NOMINAL LENGTH AND DIAMETER OF THE SHANK. LAG SCREWS AND WOOD SCREWS SHALL NOT BE DRIVEN INTO PLACE.
25. NAIL SHANK DIAMETER AND LENGTHS SHALL CONFORM TO THE FOLLOWING:
    8d.....0.131"ØX2.50"
    10d.....0.148"ØX3.00"
    12d.....0.148"ØX3.25"
    16d.....0.162"ØX3.50"
    20d.....0.192"ØX4.00"
    30d.....0.207"ØX4.50"
    40d.....0.225"ØX5.00"
26. STAPLES MAY BE SUBSTITUTED FOR NAILS TO FASTEN STRUCTURAL SHEATHING TO SUPPORTING MEMBERS PROVIDED THAT THE STAPLES HAVE A CROWN WIDTH OF 7/16" AND SHALL BE INSTALLED WITH THEIR CROWNS PARALLEL TO THE LONG DIMENSION OF THE FRAMING MEMBERS. SUBSTITUTE STAPLES FOR NAILS ACCORDING TO THE FOLLOWING:
    8d COMMON NAILS.....14 GAUGE 1-1/2" STAPLES
    10d COMMON NAILS.....13 GAUGE 1-1/2" STAPLES
    8d COMMON NAILS AT 6" O.C.....16 GAUGE 1-1/2" STAPLES AT 4" O.C.
    8d COMMON NAILS AT 4" O.C.....16 GAUGE 1-1/2" STAPLES AT 2 1/2" O.C.
    8d COMMON NAILS AT 12" O.C.....16 GAUGE 1-1/2" STAPLES AT 7 3/4" O.C.
27. FASTENERS INSTALLED INTO PRESERVATIVE TREATED WOOD AND FIRE RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATEDFASTENERS SHALL BE IN ACCORDANCE WITH ASTM A153. CAST IN AND POST INSTALLED BOLTS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B695, CLASS 55 MINIMUM. WASHERS AND OTHER HARDWARE IN CONTACT WITH FASTENERS SHALL BE OF THE SAME ANTI-CORROSIVE TREATMENT AS THE FASTENERS THEY ARE IN CONTACT WITH.
28. SHEATHING FASTENERS SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SHEATHING SURFACE.
29. SILL PLATES OF EXTERIOR WALLS AND INTERIOR BEARING WALLS MUST BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF 1/2"X10" ANCHOR BOLTS @ 72" O.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4" FROM EACH END OF EACH PIECE. A PROPERLY SIZED NUT AND STANDARD CUT WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE.
30. SHEAR WALL SILL PLATE ANCHOR BOLTS SHALL INCLUDE 0.229"X3"X3" STEEL PLATE WASHERS BETWEEN THE SILL PLATE AND NUT. 0.229"X3"X3" STEEL PLATE WASHERS ARE PERMITTED TO HAVE A DIAGONALLY SLOTTED HOLE WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4" IF A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. PLATE WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SHEATHED SIDE OF THE SHEAR WALL. SHEAR WALL SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH A MINIMUM OF 2 ANCHOR BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4" FROM EACH END OF EACH PIECE.
31. ANCHOR BOLTS FOR INTERIOR SHEAR WALLS SHALL BE SIMPSON STRONG-BOLTS, SIMPSON TITEN HD, OR HILTI KWIK BOLT TZ ANCHORS OF THE SAME DIAMETER AND SPACING AS SPECIFIED IN THE ANCHOR BOLT SCHEDULE W/ 4-1/2" MINIMUM EMBEDMENT. INTERIOR SHEAR WALL ANCHOR BOLTS MAY ALSO BE EPOXIED INTO CONCRETE WITH SIMPSON SET-XP OR HILTI HIT-RE 500-SD EPOXY AND A MINIMUM 4-1/2" EMBEDMENT.

FOUNDATION & SLAB ON GRADE

1. CONTRACTOR SHALL COMPLY WITH RECOMMENDATIONS IN THE PROJECT SOILS REPORT AND ALL ADDENDUMS, LETTERS, AND OTHER ASSOCIATED DOCUMENTS:
   PROJECT SOILS REPORT: KESSSEL ENGINEERING GROUP PROJECT #JA22-4507-01 ON SEPTEMBER 9, 2022.
2. ALLOWABLE BEARING PRESSURE = 1500 PSF
   ACTIVE LATERAL EARTH PRESSURE = 35 PCF
   AT REST LATERAL EARTH PRESSURE = 50 PCF
   PASSIVE LATERAL EARTH PRESSURE = 275 PCF
   COEFFICIENT OF FRICTION = 0.35
   MINIMUM FOOTING DEPTH = 12" BELOW THE NEAREST ADJACENT FINAL GRADE.
3. STRUCTURAL FILL UNDER FOOTINGS SHALL BE ACCORDING TO THE FOLLOWING:
   CONTINUOUS FOOTINGS.....PER SOILS REPORT
   SPOT FOOTINGS.....PER SOILS REPORT
   SLABS ON GRADE.....PER SOILS REPORT
   UNDER SLAB BASE COURSE.....PER SOILS REPORT
4. STRUCTURAL FILL TO EXTEND BEYOND PERIMETER OF FOOTING A MINIMUM OF 6" PER 12" OF FILL DEPTH.
5. ALL THE MATERIALS PLACED AT THE SITE FOR THE FOUNDATION AND BUILDING SHALL BE COMPACTED TO 95% OR AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
6. CONTRACTOR SHALL ASSURE THAT FOOTINGS ARE PROPERLY DRAINED AND THAT SOIL IS DRY AND THAT BUILDING HORIZONTAL CLEARANCE FROM FOOTINGS TO ASCENDING SLOPES SHALL BE A MINIMUM OF 25 FEET UNLESS APPROVED BY GEOTECHNICAL ENGINEER. FOOTING TRENCHES TO BE CLEARED OF ALL DELETERIOUS MATERIAL BEFORE CONCRETE IS POURED.
7. PROVIDE CRACK CONTROL JOINTS @ 10'-0" O.C. MAX. JOINTS SHOULD BE INSTALLED WITHIN 4 HOURS OF CONCRETE PLACEMENT.
8. CONTRACTOR TO FOLLOW ALL SITE PREPARATION RECOMMENDATIONS FROM SOILS REPORT FOUNDATION STEPS SHALL NOT EXCEED 4 FEET OR ½ THE HORIZONTAL DISTANCE BETWEEN STEPS. HORIZONTAL REBAR SHALL BE 12" O.C. THROUGH STEP DOWNS AND EXTEND 48 INCHES EITHER SIDE OF STEP.
9. ALLOW FOUNDATION 14 DAYS MINIMUM TO CURE PRIOR TO BACKFILL. PROVIDE BRACING AND/ OR FLOOR FRAMING BEFORE BACKFILLING FOUNDATION WALL.
10. CONCRETE SLABS SHALL BE PROTECTED FROM LOSS OF SURFACE MOISTURE FOR NOT LESS THAN 7 DAYS BY USING A CURING COMPOUND CONFORMING TO ASTM C-309 OR BY WET BURLAP OR A PLASTIC MEMBRANE.
11. LAP CONTINUOUS REINFORCING BARS WITH CLASS B LAP SPLICE ACCORDING TO CONCRETE LAP SPLICE SCHEDULE UNDER REINFORCED CONCRETE NOTES. HOOK DISCONTINUOUS ENDS OF ALL TOP BARS WITH ACI STANDARD HOOKS. REINFORCING COVER SHALL BE AS FOLLOWS:
    CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH (EXCEPT SLABS)...3"
    CONCRETE EXPOSED TO EARTH OR WEATHER BUT PLACED IN FORMS.....2"
    CONCRETE SLABS.....IN CENTER OF SLAB
12. WATERPROOFING SHALL BE PLACED BETWEEN SOIL & CONCRETE WHEREVER SOIL IS USED AS A FORM FOR CONCRETE, EXCEPT FOR FOOTINGS.
13. PLUMBING INSTALLED PARALLEL TO FOOTINGS SHALL BE INSTALLED ABOVE A 45 DEGREE LINE EXTENDING FROM THE NEAREST BOTTOM EDGE OF THE FOOTING. INSTALLING PLUMBING LINES UNDERNEATH AND PARALLEL WITH CONTINUOUS FOOTINGS IS PROHIBITED.
14. WHERE PLUMBING RUNS BELOW AND PERPENDICULAR TO CONTINUOUS FOOTINGS, A PIPE SLEEVE SHALL BE PROVIDED THAT IS TWO PIPE SIZES GREATER THAN THE PIPE PASSING BELOW THE FOOTING. THE MINIMUM PIPE SLEEVE LENGTH SHALL BE THE WIDTH OF THE FOOTING PLUS 2 TIMES THE DEPTH OF THE PLUMBING LINE BELOW THE BOTTOM OF THE FOOTING. SPRAYED ON FOAM MAY BE USED IN LIEU OF A PIPE SLEEVE AND SHALL BE AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE AND LENGTH.
15. INSTALLING PLUMBING UNDERNEATH SPOT FOOTINGS IS PROHIBITED. SPOT FOOTINGS ELEVATIONS SHALL BE LOWERED TO KEEP PLUMBING ABOVE TOP OF SPOT FOOTINGS.
16. VERTICAL PLUMBING PENETRATIONS THROUGH CONTINUOUS FOOTINGS AND SLABS SHALL BE PROVIDED WITH A PIPE SLEEVE TWO PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE FOOTING. SPRAYED ON FOAM MAY BE USED IN LIEU OF A PIPE SLEEVE AND SHALL BE AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE.
17. HORIZONTAL PLUMBING PENETRATIONS THROUGH SPOT FOOTINGS ARE PROHIBITED. SPOT FOOTING ELEVATIONS MUST BE LOWERED TO KEEP PLUMBING ABOVE FOOTINGS WHERE POSSIBLE. HORIZONTAL PLUMBING PENETRATIONS IN CONTINUOUS FOOTINGS MUST BE APPROVED BY THE ENGINEER OF RECORD.
18. ANY PIPE THAT PASSES THROUGH A FOUNDATION WALL SHALL BE PROVIDED WITH A RELIEVING ARCH, OR A PIPE SLEEVE PIPE SHALL BE BUILT INTO THE FOUNDATION WALL. THE SLEEVE SHALL BE TWO PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE WALL. SPRAYED ON FOAM MAY BE MAY BE USED IN LIEU OF A PIPE SLEEVE SO LONG AS THE FOAM IS AT LEAST AS LARGE AS THE REQUIRED PIPE SLEEVE SIZE.
19. ALL REINFORCING SHOWN TO BE HOOKED SHALL HAVE STANDARD ACI HOOKS.
20. PLACE CRACK CONTROL JOINTS BY SAW CUTTING @ 1/4" WIDE x 1 1/4" DEEP WHERE SHOWN. CUTTING TO BE PERFORMED WITHIN 24 HOURS OF CONCRETE PLACEMENT.
21. CONCRETE SLABS SHALL BE PLACED AND FINISHED WITHIN A TOLERANCE OF 1/8 INCH IN EVERY 10 FEET, AS DETERMINED BY PLACING A 10 FOOT STRAIGHT EDGE ON THE SLAB IN ANY DIRECTION. ANY DEVIATION FROM THIS WHICH REQUIRES ADDITIONAL CUTTING OF OTHER BUILDING COMPONENTS SHALL BE THE RESPONSIBILITY OF THE CONCRETE CONTRACTOR.
22. COMPACT CLEAN INTERIOR SAND FILL HAVING LESS THAN 10% FINES TO 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY, ASTM D 1557 AT OPTIMUM MOISTURE CONTENT. SOIL COMPACTION SHALL BE FIELD CONTROLLED BY QUALIFIED LABORATORY OR SOILS ENGINEER, APPROVED BY STRUCTURAL ENGINEER.
23. CAST IN ANCHOR BOLTS AND POST INSTALLED THREADED RODS EPOXIED INTO CONCRETE SHALL BE ASTM F1554 GR. 36.
24. ALL LANDSCAPING AROUND THE HOME MUST BE GRADED AWAY FROM THE HOME AT A MINIMUM GRADE OF 5% FOR THE FIRST 10 FEET OR AS FAR AS POSSIBLE TO MINIMIZE WATER INFILTRATION INTO THE SUBGRADE.

STRUCTURAL SHEET INDEX

S0.0	PROJECT NOTES & SPECIFICATIONS	S2.0	FOUNDATION PLAN
S0.1	PROJECT NOTES & SPECIFICATIONS	S3.0	FLOOR FRAMING PLAN
S1.0	TYPICAL STRUCTURAL DETAILS	S4.0	ROOF FRAMING PLAN
S1.1	TYPICAL STRUCTURAL DETAILS	S5.0	STRUCTURAL DETAILS
S1.2	TYPICAL STRUCTURAL DETAILS	S5.1	STRUCTURAL DETAILS

STRUCTURAL DESIGN CRITERIA - IBC 2018

ANALYSIS ITEMS

GRAVITY LOADS

ROOF DEAD:	15 PSF
ROOF LIVE:	20 PSF
GROUND SNOW LOAD:	15 PSF
SNOW EXPOSURE FACTOR Ce:	1.00
SNOW IMPORTANCE FACTOR Is:	1.00
ROOF SLOPE FACTOR Cs:	1.00
THERMAL FACTOR Ct:	1.00
ROOF SNOW LOAD	20 PSF
FLOOR LIVE:	40 PSF (LIVING SPACE)
	60 PSF (LOFT)
FLOOR DEAD:	55 PSF
RAIN INTENSITY, i =	3.5 IN/HR

DEFLECTION CRITERIA

ROOF MEMBERS	
Δ(LIVE)	L/360
Δ(TOTAL LOAD)	L/240
FLOOR MEMBERS	
Δ(LIVE)	L/360
Δ(TOTAL LOAD)	L/240
WALLS	
Δ(LIVE)	L/240

WIND DESIGN PARAMETERS

ULTIMATE WIND SPEED , Vnlt:	105 MPH (Vasd = 82 MPH)
EXPOSURE:	"C"
HT. AND EXPOSURE COEFF., I :	1.35
RISK CATEGORY:	II
COMPONENTS & CLADDING DESIGN WIND LOADS TO BE PER ASCE 7-16	

SEISMIC DESIGN PARAMETERS

SEISMIC DESIGN CATEGORY:	C
SITE CLASS:	D
RISK CATEGORY:	II
IMPORTANCE FACTOR, Ie:	1.00
RESPONSE MOD. FACTOR, R:	2.0
OVER STRENGTH FACTOR, Ω:	2.5
DEFLECTION AMPLIFICATION FACTOR, Cd:	1.75
BASIC SIESMIC-FORCE-RESISTING SYSTEM(S):	ORDINARY REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR, V:	CsW
SEISMIC DESIGN COEFFICIENT, Cs:	0.1617
ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE
Ss:	0.313
S1:	0.096
Sds:	0.154
Sos:	0.323

GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS, SPANS, AND CONDITIONS WITH ARCHITECTURAL DRAWINGS. IF ANY OMISSIONS, MISTAKES, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE CONSTRUCTION DRAWINGS, THE ENGINEER SHALL BE PROMPTLY NOTIFIED SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH A FAILURE.
2. IF DISCREPANCIES ARE FOUND, THE MORE STRINGENT SPECIFICATION SHALL BE FOLLOWED. CONTRACTOR RESPONSIBLE FOR ADEQUATE BRACING OF STRUCTURAL MEMBERS, WALLS, AND NON-STRUCTURAL ITEMS DURING CONSTRUCTION.
3. THE ENGINEER AND HIS CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE WORK HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY OMISSIONS, MISTAKES, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE WORK PRODUCT, THE ENGINEER SHALL BE PROMPTLY NOTIFIED SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH A FAILURE.
4. MANY PORTIONS OF THESE DRAWINGS, NOTES AND SPECIFICATIONS ARE THE RESULT OF DEMANDS BY VARIOUS APPROVING AGENCIES THAT MUST BE PERFORMED AS PART OF THIS WORK. ANY ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER, BUT OF THE PARTIES RESPONSIBLE FOR MAKING THE CHANGE AND TAKING ACTION TO DO SO. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE ENGINEER OR THE CONTRADICTION TO THE ENGINEER'S WORK PRODUCT, THE INTENT, AND/OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER, BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION. THE ENGINEER SHOULD BE CONTACTED IN MATTERS OF ANY AND ALL CHANGES TO THE DRAWINGS AND SPECIFICATIONS HEREIN WITHOUT EXCEPTION.
5. NON STRUCTURAL FRAMING REQUIREMENTS ARE NOT SPECIFIED ON STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL FRAMING REQUIRED.
6. CONTRACTOR SHALL ASSURE THAT ALL PRODUCTS AND HARDWARE ARE USED PER MANUFACTURER'S RECOMMENDATIONS.

POST INSTALLED ANCHORS

1. POST INSTALLED ANCHORS REQUIRE SPECIAL INSPECTION AS STATED IN THE STATEMENT OF SPECIAL INSPECTIONS SECTION. COPIES OF SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL.
2. POST INSTALLED ANCHORS SHALL BE AS FOLLOWS:
   A. INSTALLED IN CONCRETE
      - SIMPSON TITEN HD (3/8", 1/2", AND 3/4" DIAMETERS)
      - SIMPSON STRONG-BOLT
      - HILTI KWIK BOLT TZ
      - SIMPSON SET-XP EPOXY
      - HILTI HIT-RE 500-SD EPOXY
   B. INSTALLED IN MASONRY
      - HILTI KWIK BOLT 3
      - SIMPSON TITEN HD
      - SIMPSON WEDGE-ALL
3. INSTALLATION AND MIN. EMBEDMENT SHALL BE IN ACCORDANCE WITH SPECS. OR AS SPECIFIED ON DRAWINGS, WHICH EVER IS GREATER.
4. CONTRACTOR TO FOLLOW MANUFACTURERS REQU

STATEMENT OF SPECIAL INSPECTION

1. ALL SPECIAL INSPECTION REPORTS, TESTS, QUALIFICATIONS, AND CERTIFICATES OF COMPLIANCE SHALL BE APPROVED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE CITY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
2. CONTRACTORS MUST SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY PER IBC 2018 SECTION 1704.4. CONTRACTOR IS REQUIRED TO FOLLOW QUALITY ASSURANCE PLAN PER IBC 2018 SECTION 1704.3.1.
3. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO SEE THAT THE TEST AND INSPECTIONS ARE PERFORMED. JOB SITE VISITS BY THE ENGINEER OF RECORD DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR SPECIAL INSPECTIONS.
4. CONTRACTOR SHALL PROVIDE NAME OF APPROVED SPECIAL INSPECTION AGENCY AND QUALIFICATION OF INDIVIDUAL TO
5. BUILDING OFFICIAL FOR APPROVAL PRIOR TO CONSTRUCTION.
6. THE FOLLOWING SPECIAL INSPECTIONS ARE REQUIRED BY THE CURRENT EDITION OF THE IBC:

EXPANSION, ADHESIVE, AND POST INSTALLED ANCHORS — PER ICC EVALUATION REPORT

ANCHOR	APPROVED APPLICATION	ICC ES EVALUATION #
- SIMPSON STRONG-BOLT	CONCRETE	#ESR-1771
- SIMPSON TITEN HD (3/8", 1/2" & 3/4" DIA.)	CONCRETE	#ESR-2713
- SIMPSON SET-XP EPOXY	CONCRETE	#ESR-2508
- HILTI KWIK BOLT TZ	CONCRETE	#ESR-1917
- HILTI HIT-RE 500-SD EPOXY	CONCRETE	#ESR-2322
- HILTI KWIK BOLT 3	MASONRY	#ESR-1358
- SIMPSON TITEN HD	MASONRY	#ESR-1056
- SIMPSON WEDGE-ALL	MASONRY	#ESR-1396

SOILS - IBC 1705.6 AND TABLE 1705.6

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	-	X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	-	X
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	-	X
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	-
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUB-GRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	-	X

REINFORCED MASONRY TMS 602-16 TABLE 4

INSPECTION TASK	FREQUENCY			REFERENCE FOR CRITERIA	
	LEVEL 1	LEVEL 2	LEVEL 3	TMS 402	TMS 602
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
A. PROPORTIONS OF SITE-PREPARED MORTAR	NR	P	P		ART. 2.1, 2.6 A, & 2.6 C
B. GRADE AND SIZE OF PRESTRESSING AND ANCHORAGES	NR	P	P		ART. 2.4 B, & 2.4 H
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES	NR	P	P		ART. 3.4 B, & 3.6 A
D. PRESTRESSING TECHNIQUE	NR	P	P		ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	NR	C(b)/P(c)	C		ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION	NR	P	C		ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT FOLLOWING ARE IN COMPLIANCE:					
A. GROUT SPACE	NR	P	C		ART. 3.2 D & 3.2 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES	NR	P	P	SEC. 10.8 & 10.9	ART. 2.4 & 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS	NR	P	C	SEC. 6.1 6.3.1, 6.3.6, & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	NR	P	P		ART. 2.6 B & 2.4 G.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:					
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	NR	P	P		ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	NR	P	P		ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	NR	P	P		ART. 3.3 F
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	NR	P	C	SEC. 1.2.1(e), 6.2.1, & 6.3.1	
E. WELDING OF REINFORCEMENT	NR	C	C	SEC. 6.1.6.1.2	
F. PREPARING, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C))	NR	P	P		ART. 1.8 C & 1.8 D
G. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	NR	C	C		ART. 3.6 B
H. PLACEMENT OF GROUP AND PRESTRESING GROUP FOR BONDED TENDONS IS IN COMPLIANCE	NR	C	C		ART. 3.5 & 3.6 C
H. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	NR	C(b)/P(c)	C		ART. 3.3 B.9 & 3.3 F.1.b
4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRIMS	NR	P	C		ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, & 1.4 B.4

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PROJECT NAME
WRIGHT RESIDENCE
OMNIBLOCK

PROJECT ADDRESS
63 STAR DR. LEICESTER TOWNSHIP
BUNCOMBE COUNTRY, NC

PROJECT NUMBER
22370

CLIENT
THOMAS WRIGHT

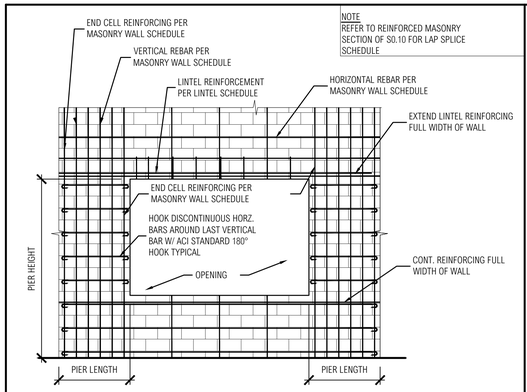
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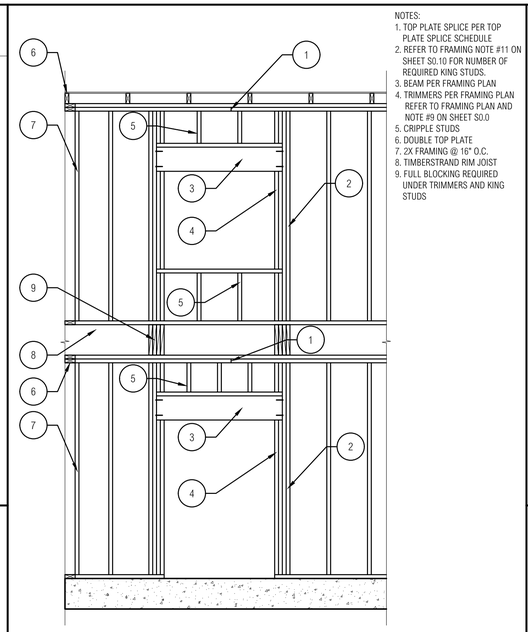
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PROJECT NOTES AND SPECIFICATIONS

SHEET
S0.1



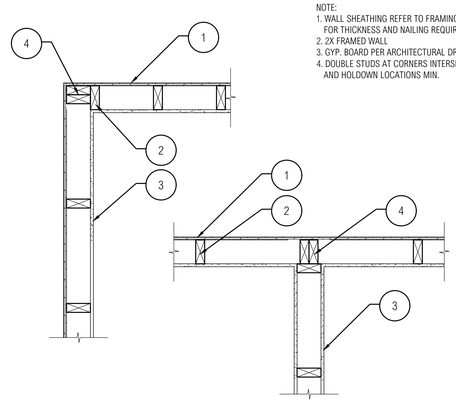
9 S1.0 FORCE TRANSFER MASONRY SHEAR WALL

SCALE: NTS



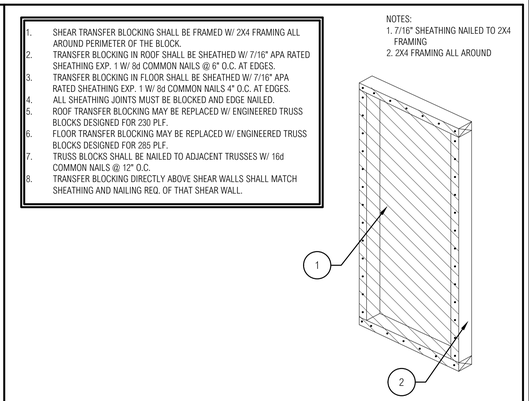
7 S1.0 OPENING IN MULTIPLE STORY WOOD STUD FRAMED WALL

SCALE:NTS



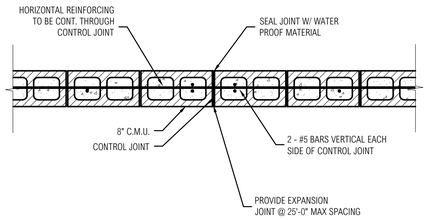
4 S1.0 WOOD STUD FRAMED CORNERS & INTERSECTIONS

SCALE:NTS



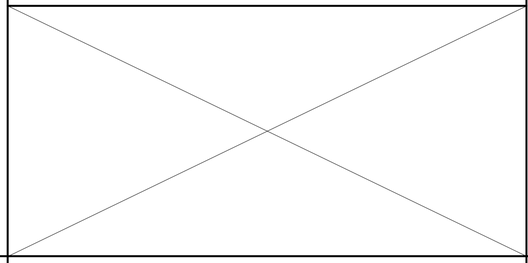
1 S1.0 SHEAR TRANSFER BLOCKING PANELS

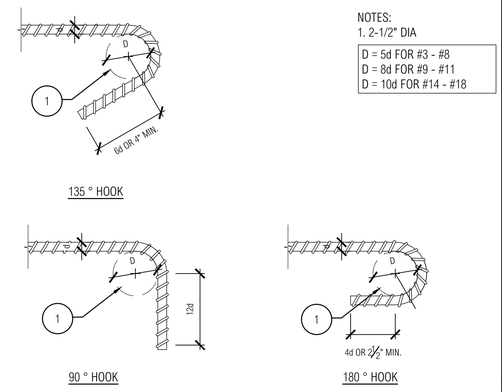
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10 S1.0 EXPANSION CONTROL JOINT

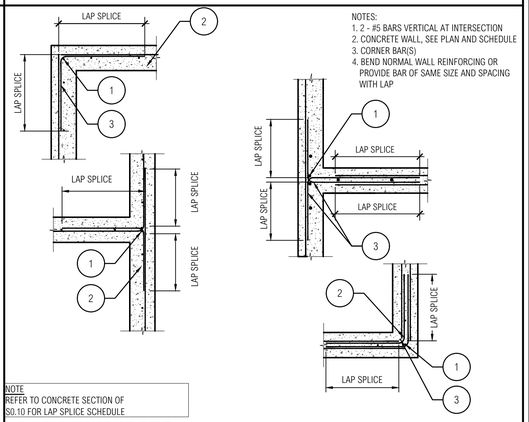
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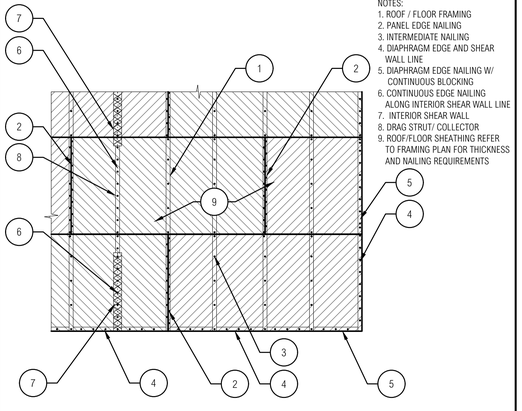
5 S1.0 STANDARD ACI HOOKS

SCALE:NTS



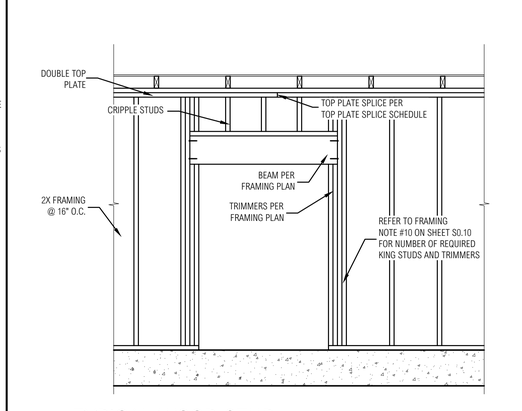
2 S1.0 CONCRETE CORNERS & INTERSECTIONS

SCALE: NTS



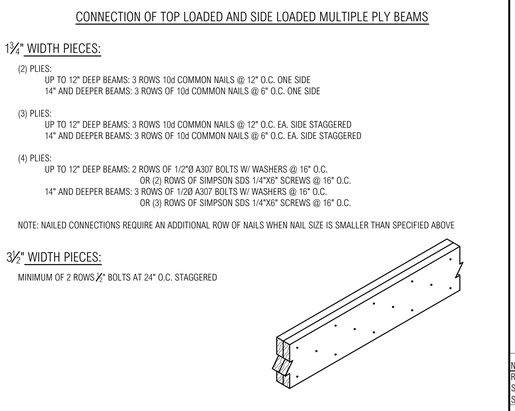
11 S1.0 UNBLOCKED WOOD DIAPHRAGM

SCALE:NTS



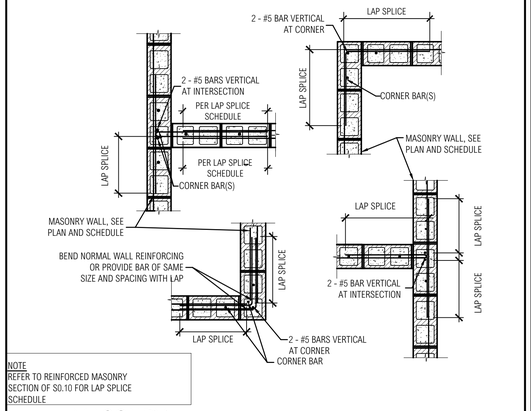
8 S1.0 TYPICAL WOOD STUD WOOD STUD FRAMED WALL

SCALE:NTS



6 S1.0 MULTIPLE PLY BEAM FASTENING

SCALE:NTS



3 S1.0 MASONRY CORNERS & INTERSECTIONS

SCALE: NTS

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OMNIBLOCK

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BUNCOMBE COUNTRY, NC

PROJECT NUMBER
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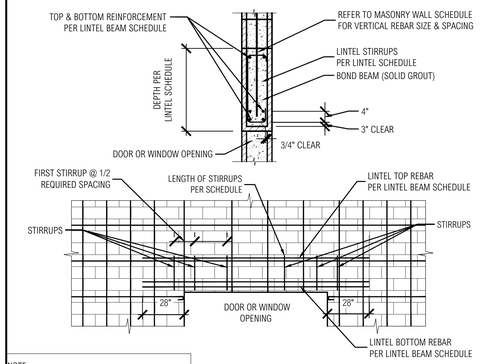
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TYPICAL STRUCTURAL DETAILS

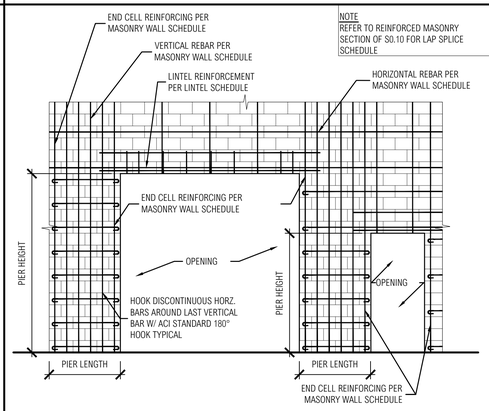
SHEET
S1.0



NOTE
REFER TO REINFORCED MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

10 S1.1 — 7 S1.1 — 4 S1.1

1 S1.1 MASONRY LINTEL
SCALE: NTS



NOTE
REFER TO REINFORCED MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

11 S1.1 — 8 S1.1 — 5 S1.1

2 S1.1 OPENING IN MASONRY WALL
SCALE: NTS

12 S1.1 — 9 S1.1 — 6 S1.1 — 3 S1.1

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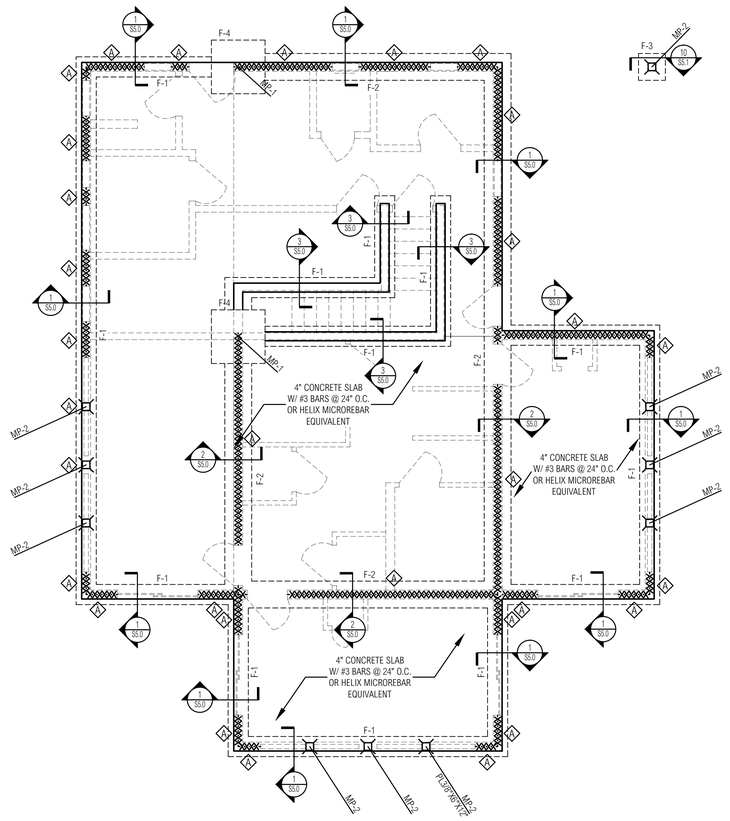
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TITLE SHEET
TYPICAL STRUCTURAL DETAILS

SHEET
S1.1



1 S2.0 FOUNDATION PLAN

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

SYMBOL LEGEND

	FOOTING
COLUMN SIZE / COLUMN BASE	WOOD COLUMN
A	MASONRY WALL
MP-1	MASONRY PILASTER

GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES, OMISSIONS , OR ERRORS BEFORE COMMENCING CONSTRUCTION.
2. REFER TO SHEET S0.10 FOR ALL CONCRETE, FOUNDATION, AND SUBGRADE SPECIFICATIONS
3. CONTRACTOR TO FOLLOW ALL SITE PREPERATIONS FROM SOILS REPORT
4. ALL LANDSCAPING AROUND THE HOME MUST BE GRADED AWAY FROM THE HOME AT A MINIMUM GRADE OF 5% FOR THE FIRST 10 FEET OR AS FAR AS POSSIBLE TO MINIMIZE WATER INFILTRATION INTO THE SUBGRADE

FOOTING SCHEDULE

MARK	FOOTING SIZE	REINFORCEMENT	FOOTING TYPE
F-1	18" X 8" X CONT.	(2) #4 BARS CONT.*	CONTINUOUS
F-2	24" X 8" X CONT.	(2) #4 BARS CONT.**	CONTINUOUS
F-3	24" SQ. X 8"	(2) #4 EA. WAY	SPOT
F-4	42" SQ. X 8"	(4) #4 BARS EA. WAY	SPOT

* 527.0 HELIX MICRO REBAR/FT CAN BE USED AS A SUBSTITUTION FOR (2) #4 BARS CONTINUOUS

** 790.0 HELIX MICRO REBAR/FT CAN BE USED AS A SUBSTITUTION FOR (3) #4 BARS CONTINUOUS

MASONRY WALL SCHEDULE

MARK	NOM WIDTH	GROUTING	VERT. REBAR	HORIZ. REBAR	END CELL REBAR
A	8"	PARTIAL	#4 BAR @ 48" O.C.	2-W1.7 JOINT REINF. @ 16" OC OR #4 BARS @ 120" O.C.	(2) #4 BARS IN LAST CELL

1. REFER TO 3/S1.0, 1/S1.1, 2/S1.1, 10/S1.0 AND 9/S1.0 FOR WALL DETAILS
2. PARTIALLY GROUTED WALLS REQUIRED GROUTING IN WALL CELLS WITH REINFORCING. FULLY GROUTED WALLS REQUIRE GROUTING IN ALL CELLS

PILASTER SCHEDULE

MARK	NOM. DEPTH	NOM. WIDTH	VERTICAL REBAR	HORIZONTAL TIES & SPACING
MP-1	8"	16"	(4) #4 BARS VERT.	#3 TIES @ 8" O.C.
MP-2	8"	8"	(2) #4 BARS VERT.	N/A

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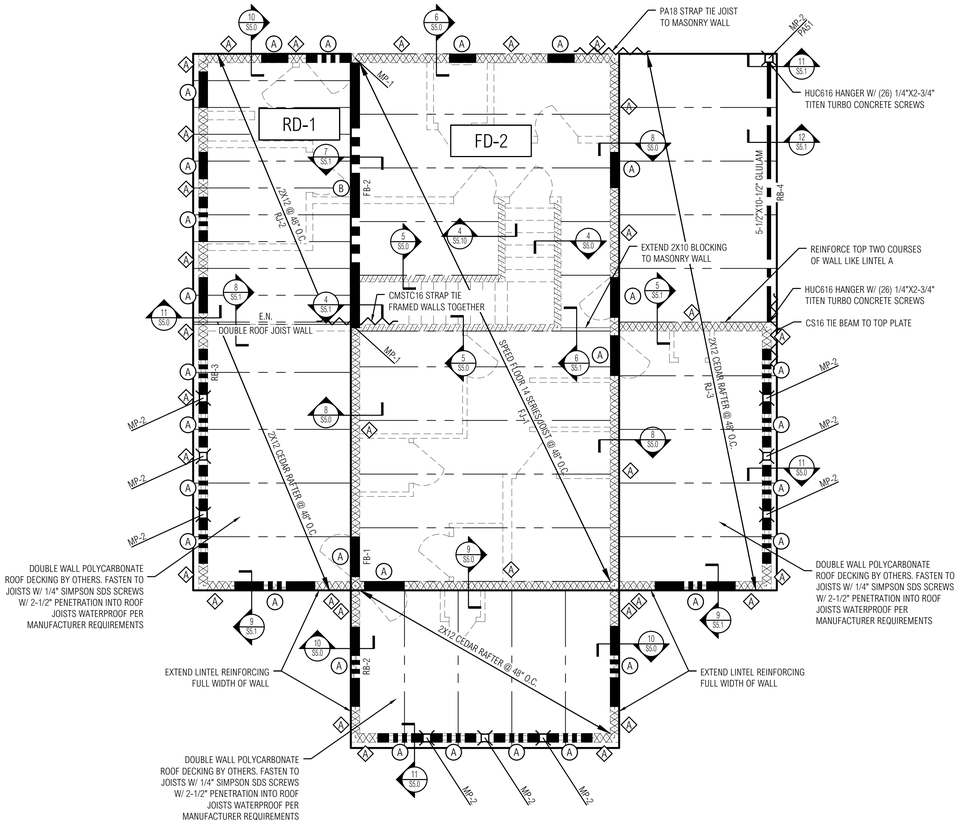
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NORTH CAROLINA PROFESSIONAL SEAL 046252 ENGINEER JEFFREY M. HEDMAN 12/7/22

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TITLE SHEET
FOUNDATION PLAN

SHEET
S2.0



1 S3.0 FLOOR FRAMING PLAN

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

SYMBOL LEGEND

A	MASONRY WALL
	WOOD FRAMED BEARING WALL
	ROOF TRUSS / JOIST
RB-1	BEAM
A	LINTEL
COLUMN SIZE / COLUMN CAP	COLUMN SYMBOL
E.N.	EDGE NAILING FULL LENGTH OF TRUSS
MP-1	MASONRY PILASTER

GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEERS OF DISCREPANCIES, OMISSIONS , OR ERRORS BEFORE CONSTRUCTION.
2. REFER TO SHEET S0.10 FOR ALL GENERAL FRAMING AND MATERIAL SPECIFICATIONS.
3. SEE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS
4. CONTRACTOR TO FOLLOW ALL SITE PREPARATIONS FROM SOILS REPORT.
5. ENGINEERED TRUSS MANUFACTURER TO COORDINATE MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS
6. ALL SHOP DRAWINGS TO BE REVIEWED AND APPROVED BY L.R. POPE ENGINEERING INC.
7. CONTRACTOR TO FOLLOW ALL SIMPSON INSTALLATION REQUIREMENTS.
8. REFER TO FRAMING NOTES FOR ADDITIONAL REQUIREMENTS

WOOD DIAPHRAGM SCHEDULE

MARK	SHEATHING[1] THICKNESS (SPAN RATING)	PANEL EDGE BLOCKING	PANEL NAILING[2] EDGES FIELD	FRAMING @ PANEL FEDGES
RD-1	7/16" (24/16)	UNBLOCKED	8d @ 6" O.C. 8d @ 12" O.C.	2X

1. ALL SHEATHING TO BE APA RATED EXP. 1
2. EDGE NAILING REQUIRED ALONG DIAPHRAGM PERIMETER, SHEAR WALLS, DRAG STRUTS, SUPPORTED PANEL EDGES AND BLOCKED PANEL EDGES
3. SHEATHING SHALL HAVE TONGUE AND GROOVE EDGES
4. FLOOR SHEATHING SHALL BE GLUED TO ALL SUPPORTS IN ADDITION TO REQUIRED DIAPHRAGM NAILING

MARK	CONCRETE ROOF DIAPHRAGM
FD-2	4" CONCRETE SLAB (2-1/2" OVER THE TOP OF SPEEDFLOOR JOIST FIN) W/ #3 BARS @ 16" O.C. EA. WAY

MASONRY WALL SCHEDULE

MARK	NOM WIDTH	GROUTING	VERT. REBAR	HORIZ. REBAR	END CELL REBAR
A	8"	PARTIAL	#4 BAR @ 48" O.C.	2-W1.7 JOINT REINF. @ 16" OC OR #4 BARS @ 120" O.C.	(2) #4 BARS IN LAST CELL

1. REFER TO 3/S1.0, 1/S1.1, 2/S1.1, 10/S1.0 AND 9/S1.0 FOR WALL DETAILS
2. PARTIALLY GROUTED WALLS REQUIRED GROUTING IN WALL CELLS WITH REINFORCING. FULLY GROUTED WALLS REQUIRE GROUTING IN ALL CELLS

LINTEL SCHEDULE

LINTEL NUMBER	WIDTH	DEPTH	TOP REBAR	BOTTOM REBAR	STIRRUPS & SPACING
A	8"	16"	(2) #4 BARS	(2) #4 BARS	NOT REQUIRED
B	8"	40"	(4) #5 BARS	(4) #5 BARS	#3 "U" STIRRUPS @ 8" O.C. 4'-0" FROM EACH END OF BEAM

SEE DETAIL 1/S1.1 FOR CROSS SECTION

PILASTER SCHEDULE

MARK	NOM. DEPTH	NOM. WIDTH	VERTICAL REBAR	HORIZONTAL TIES & SPACING
MP-1	8"	16"	(4) #4 BARS VERT.	#3 TIES @ 8" O.C.
MP-2	8"	8"	(2) #4 BARS VERT.	N/A

JEFF HEDMAN, PE
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PROJECT NAME
WRIGHT RESIDENCE
OMNIBLOCK

PROJECT ADDRESS
63 STAR DR. LEICESTER TOWNSHIP
BUNCOMBE COUNTRY, NC

PROJECT NUMBER
22370

CLIENT
THOMAS WRIGHT

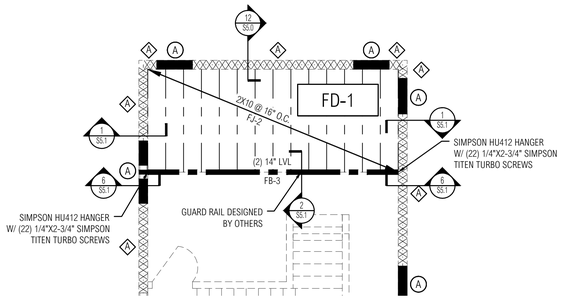
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046252 JEFFREY M. HEDMAN

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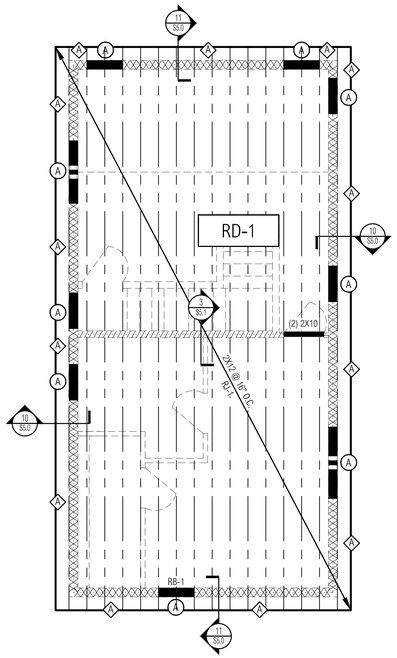
TITLE SHEET
FLOOR FRAMING PLAN

SHEET
S3.0



2 S4.0 LOFT FRAMING PLAN

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



1 S4.0 ROOF FRAMING PLAN

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

SYMBOL LEGEND

	WOOD FRAMED BEARING WALL
1'-0" SW-1	WOOD FRAMED BEARING/SHEAR WALL
	ROOF TRUSS / JOIST
RB-1	BEAM
COLUMN SIZE / COLUMN CAP	COLUMN SYMBOL
E.N.	EDGE NAILING FULL LENGTH OF TRUSS
MP-1	MASONRY PILASTER
A	MASONRY WALL

GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS AND NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES, OMISSIONS , OR ERRORS BEFORE CONSTRUCTION.
2. REFER TO SHEET S0.10 FOR ALL GENERAL FRAMING AND MATERIAL SPECIFICATIONS.
3. SEE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS
4. CONTRACTOR TO FOLLOW ALL SITE PREPARATIONS FROM SOILS REPORT.
5. ENGINEERED TRUSS MANUFACTURER TO COORDINATE MECHANICAL EQUIPMENT LOCATIONS WITH MECHANICAL DRAWINGS
6. ALL SHOP DRAWINGS TO BE REVIEWED AND APPROVED BY L.R. POPE ENGINEERING INC.
7. CONTRACTOR TO FOLLOW ALL SIMPSON INSTALLATION REQUIREMENTS.
8. REFER TO FRAMING NOTES FOR ADDITIONAL REQUIREMENTS

WOOD FRAMED WALLS

1. ALL INTERIOR WALLS TO BE FRAMED WITH 2X4 NOM. DF#2 STUDS @ 16" O.C.

WOOD DIAPHRAGM SCHEDULE

MARK	SHEATHING[1] THICKNESS (SPAN RATING)	BLOCKING	PANEL NAILING EDGES FIELD	FRAMING @ PANEL FEDGES
RD-1	7/16" (24/16)	UNBLOCKED	8d @ 6" O.C. 8d @ 12" O.C.	2X
FD-1	23/32" (48/24)	UNBLOCKED	8d @ 6" O.C. 8d @ 12" O.C.	2X

1. ALL SHEATHING TO BE APA RATED EXP. 1
2. EDGE NAILING REQUIRED ALONG DIAPHRAGM PERIMETER, SHEAR WALLS, AND DRAG STRUTS.

MASONRY WALL SCHEDULE

MARK	NOM WIDTH	GROUTING	VERT. REBAR	HORIZ. REBAR	END CELL REBAR
A	8"	PARTIAL	#4 BAR @ 48" O.C.	2-W1.7 JOINT REINF. @ 16" OC OR #4 BARS @ 120" O.C.	(2) #4 BARS IN LAST CELL

1. REFER TO 3/S1.0, 1/S1.1, 2/S1.1, 10/S1.0 AND 9/S1.0 FOR WALL DETAILS
2. PARTIALLY GROUTED WALLS REQUIRED GROUTING IN WALL CELLS WITH REINFORCING. FULLY GROUTED WALLS REQUIRE GROUTING IN ALL CELLS

LINTEL SCHEDULE

LINTEL NUMBER	WIDTH	DEPTH	TOP REBAR	BOTTOM REBAR	STIRRUPS & SPACING
A	8"	16"	(2) #4 BARS	(2) #4 BARS	NOT REQUIRED
B	8"	40"	(4) #5 BARS	(4) #5 BARS	#3 "U" STIRRUPS @ 8" O.C. 4'-0" FROM EACH END OF BEAM

SEE DETAIL 1/S1.1 FOR CROSS SECTION

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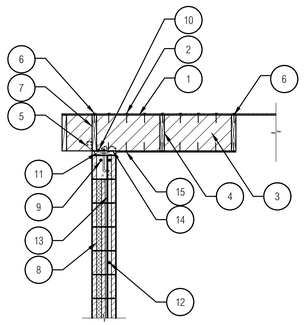
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046252 JEFFREY M. HEDMAN

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TITLE SHEET
ROOF AND LOFT FRAMING PLAN

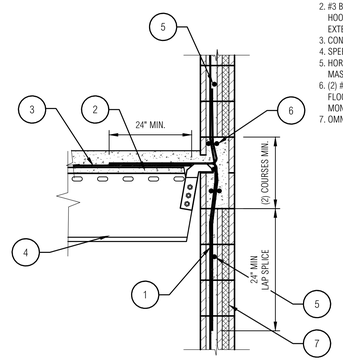
SHEET
S4.0



NOTES:
1. ROOF SHEATHING REFER TO ROOF DIAPHRAGM SCHEDULE FOR THICKNESS AND NAILING REQUIREMENTS
2. EDGE NAILING OVER BLOCKING
3. 2X12 BLOCKING @ 48" O.C. OUT 4'-0" MIN.
4. ROOF JOIST PER FRAMING PLAN
5. SIMPSON H3 EACH BLOCK
6. DIAPHRAGM EDGE NAILING
7. 2X12 RIM BLOCKING
8. OMNIBLOCK WALL PER PLAN
9. (2) #4 BARS CONT. IN TOP COURSE
10. A35 CLIPS @ 24" O.C.
11. 2X8 DF#2 TOP PLATE W/ 5/8"Ø X 10" ANCHOR BOLTS @ 24" O.C.
12. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
13. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
14. A35 CLIP EA. BLOCK
15. SIMPSON CS16 ON BOTTOM OF BLOCKING

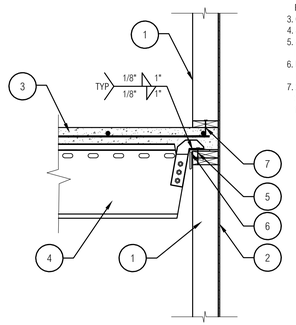
NOTE
REFER TO MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

10 ROOF TRUSS ON EXTERIOR BEARING WALL
S5.0 SCALE: NTS



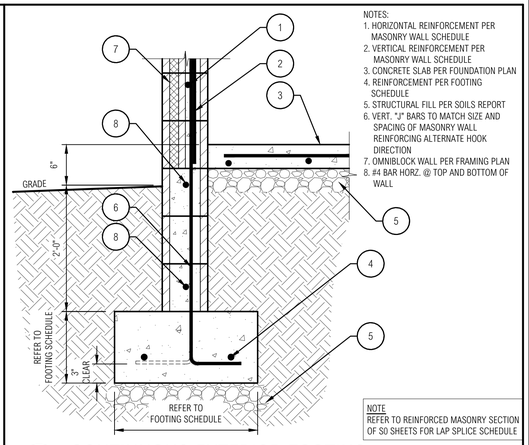
NOTES:
1. VERTICAL REINFORCING PER MASONRY WALL SCHEDULE
2. #3 BARS @ 16" O.C.WITH ACI STANDARD HOOKS ALTERNATE HOOK DIRECTION EXTEND 24" INTO SLAB
3. CONCRETE SLAB PER FRAMING PLAN
4. SPEEDFLOOR JOIST PER FRAMING PLAN
5. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
6. (2) #4 BARS CONT. ABOVE AND BELOW FLOOR LEVEL. GROUT (2) COURSES MONOLITHICALLY WITH FLOOR SLAB
7. OMNIBLOCK WALL PER FRAMING PLAN

7 SPEEDFLOOR JOIST BEARING ON EXT WALL
S5.0 SCALE: NTS



NOTES:
1. WOOD FRAMED WALL PER FRAMING PLANS
2. WALL SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
3. CONCRETE SLAB PER FRAMING PLAN
4. SPEEDFLOOR JOIST PER FRAMING PLAN
5. (4)1/4"X3" SIMPSON SDS OR (2) 1/2" ØA307 BOLTS EA. ANGLE
6. L4X4X16" WELD SPEED FLOOR JOIST SHOE TO ANGLE
7. 2X TREATED SILL PLATE W/ 3/16"X3-1/4" SIMPSON TITEN TURBO SCREWS OR EQ. @ 12" O.C.

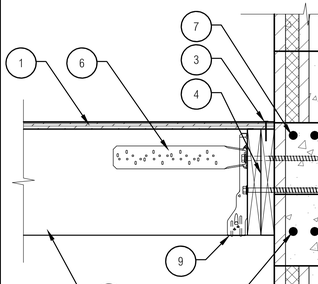
4 SPEEDFLOOR JOIST BEARING ON WALL
S5.0 SCALE: NTS



NOTES:
1. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
2. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
3. CONCRETE SLAB PER FOUNDATION PLAN
4. REINFORCEMENT PER FOOTING SCHEDULE
5. STRUCTURAL FILL PER SOILS REPORT
6. VERT. "J" BARS TO MATCH SIZE AND SPACING OF MASONRY WALL REINFORCING ALTERNATE HOOK DIRECTION
7. OMNIBLOCK WALL PER FRAMING PLAN
8. #4 BAR HORZ. @ TOP AND BOTTOM OF WALL

NOTE
REFER TO REINFORCED MASONRY SECTION OF S0 SHEETS FOR LAP SPLICE SCHEDULE

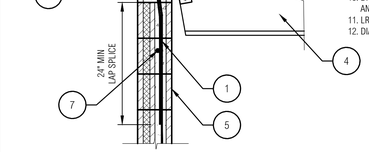
1 CONTINUOUS EXTERIOR FOOTING
S5.0 SCALE:NTS



NOTES:
1. ROOF SHEATHING REFER TO ROOF DIAPHRAGM SCHEDULE FOR THICKNESS AND NAILING REQUIREMENTS
2. ROOF JOIST PER FRAMING PLAN
3. SIMPSON H3 EACH JOIST
4. 2X CONT. BLOCKING
5. OMNIBLOCK PER FRAMING PLAN
6. (2) #4 BARS CONT. IN TOP COURSE
7. A35 CLIPS @ 24" O.C.
8. 2X8 DF#2 TOP PLATE W/ 5/8"Ø X 10" ANCHOR BOLTS @ 24" O.C.
9. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
10. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
11. BIRDSMOUTH JOIST AT TOP PLATE OR PROVIDE SHIMS FOR FULL BEARING
12. A35 CLIPS EA. JOIST
13. DIAPHRAGM OF EDGE NAILING

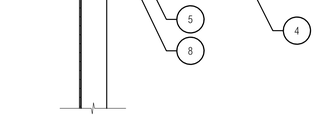
NOTE
REFER TO MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

11 ROOF JOIST ON EXTERIOR BEARING WALL
S5.0 SCALE: NTS



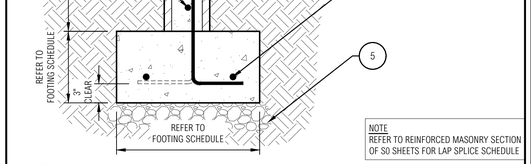
NOTES:
1. VERTICAL REINFORCING PER MASONRY WALL SCHEDULE
2. #3 BARS @ 16" O.C.WITH ACI STANDARD HOOKS ALTERNATE HOOK DIRECTION EXTEND 24" INTO SLAB
3. CONCRETE SLAB PER FRAMING PLAN
4. SPEEDFLOOR JOIST PER FRAMING PLAN
5. OMNIBLOCK WALL PER FRAMING PLAN
6. (2) #4 BARS CONT. ABOVE AND BELOW FLOOR LEVEL. GROUT (2) COURSES MONOLITHICALLY WITH FLOOR SLAB
7. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
8. DOUBLE WALL POLYCARBONATE ROOF DECKING BY OTHERS. FASTEN TO JOISTS W/ 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS WATERPROOF PER MANUFACTURER REQUIREMENTS
9. (2) 2X12 LEDGER W/ (2) ROWS OF 1/2"ØX8" SIMPSON TITEN HD ANCHORS @ 32" O.C. STAGGERED
10. LTTP2 W/ 3/4" ØX8" SIMPSON TITEN HD ANCHORS @ 48" O.C.
11. LRU210Z HANGER EA JOIST
12. DIAPHRAGM EDGE NAILING

8 SPEEDFLOOR JOIST BEARING ON EXT WALL
S5.0 SCALE: NTS



NOTES:
1. WOOD FRAMED WALL PER FRAMING PLAN
2. 16d COMMON NAILS @ 12" O.C.
3. SUSPENDED CONCRETE SLAB PER PLAN
4. SPEED FLOOR JOIST PER PLAN
5. (2) 2X10 CONT. BLOCKING
6. DOUBLE TOP PLATE
7. 2X SILL PLATE
8. (2) ROWS OF 1/4"X4-1/2" SIMPSON SDS SCREWS @ 16" O.C.
9. COIL STRAP PER PLAN

5 SPEED FLOOR JOIST PARALLEL TO WOOD WALL
S5.0 SCALE: NTS



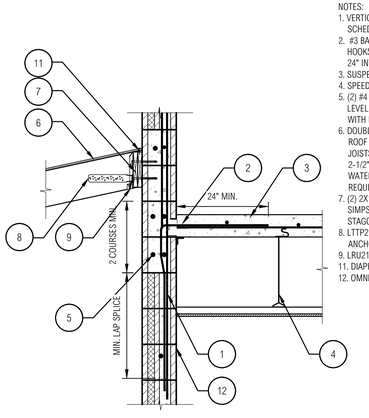
NOTES:
1. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
2. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
3. CONCRETE SLAB PER FOUNDATION PLAN
4. REINFORCEMENT PER FOOTING SCHEDULE
5. STRUCTURAL FILL PER SOILS REPORT
6. VERT. "J" BARS TO MATCH SIZE AND SPACING OF MASONRY WALL REINFORCING ALTERNATE HOOK DIRECTION
7. OMNIBLOCK WALL PER FRAMING PLAN
8. #4 BAR HORZ. @ TOP AND BOTTOM OF WALL

NOTE
REFER TO REINFORCED MASONRY SECTION OF S0 SHEETS FOR LAP SPLICE SCHEDULE

2 CONTINUOUS EXTERIOR FOOTING
S5.0 SCALE:NTS

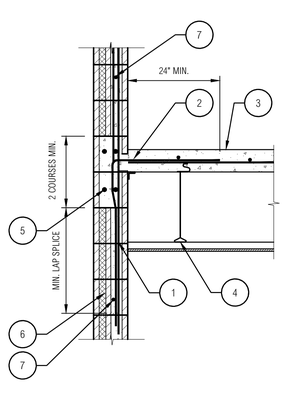
NOTES:
1. FLOOR SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
2. FLOOR JOISTS PER FRAMING PLANS
3. DIAPHRAGM EDGE NAILING
4. (2) 2X10 LEDGER W/ (2) ROWS OF 5/8"ØX8" SIMPSON TITEN HD ANCHORS @ 24" O.C. STAGGERED
5. OMNIBLOCK WALL PER FRAMING PLANS
6. LTTP2 W/ 3/4"ØX8" TITEN HD ANCHORS @ 48" O.C. STAGGERED W/ ANCHORS ON OPPOSITE SIDE OF WALL
7. (2) #4 BARS CONT ABOVE LEDGER CONNECTION
8. (2) #4 BARS CONT. BELOW LEDGER CONNECTION
9. LUZ28 HANGER EA JOIST

12 MEZZANING FLOOR JOIST ON EXTERIOR BEARING WALL
S5.0 SCALE:NTS



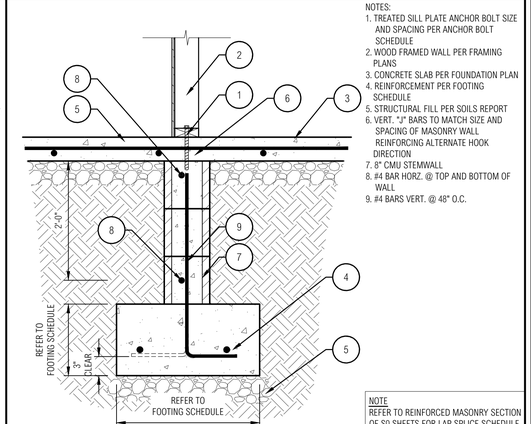
NOTES:
1. VERTICAL REINFORCING PER MASONRY WALL SCHEDULE
2. #3 BARS @ 16" O.C.WITH ACI STANDARD HOOKS ALTERNATE HOOK DIRECTION EXTEND 24" INTO SLAB
3. SUSPENDED CONCRETE SLAB PER PLAN
4. SPEED FLOOR JOIST PER PLAN
5. (2) #4 BARS CONT. ABOVE AND BLOW FLOOR LEVEL. GROUT (2) COURSES MONOLITHICALLY WITH FLOOR SLAB
6. DOUBLE WALL POLYCARBONATE ROOF DECKING BY OTHERS. FASTEN TO JOISTS W/ 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS WATERPROOF PER MANUFACTURER REQUIREMENTS
7. (2) 2X12 LEDGER W/ (2) ROWS OF 1/2"ØX8" SIMPSON TITEN HD ANCHORS @ 32" O.C. STAGGERED
8. LTTP2 W/ 3/4" ØX8" SIMPSON TITEN HD ANCHORS @ 48" O.C.
9. LRU210Z HANGER EA JOIST
11. DIAPHRAGM OF EDGE NAILING
12. OMNIBLOCK WALL PER FRAMING PLAN

9 SPEEDFLOOR JOIST PARALLEL TO EXT WALL
S5.0 SCALE: NTS



NOTES:
1. VERTICAL REINFORCING PER MASONRY WALL SCHEDULE
2. #3 BARS @ 16" O.C.WITH ACI STANDARD HOOKS ALTERNATE HOOK DIRECTION EXTEND 24" INTO SLAB
3. SUSPENDED CONCRETE SLAB PER PLAN
4. SPEED FLOOR JOIST PER PLAN
5. (2) #4 BARS CONT. ABOVE AND BLOW FLOOR LEVEL. GROUT (2) COURSES MONOLITHICALLY WITH FLOOR SLAB
6. OMNIBLOCK WALL PER FRAMING PLAN
7. HORIZONTAL REINFORCING PER MASONRY WALL SCHEDULE

6 SPEEDFLOOR JOIST PARALLEL TO EXT WALL
S5.0 SCALE: NTS



NOTES:
1. TREATED SILL PLATE ANCHOR BOLT SIZE AND SPACING PER ANCHOR BOLT SCHEDULE
2. WOOD FRAMED WALL PER FRAMING PLANS
3. CONCRETE SLAB PER FOUNDATION PLAN
4. REINFORCEMENT PER FOOTING SCHEDULE
5. STRUCTURAL FILL PER SOILS REPORT
6. VERT. "J" BARS TO MATCH SIZE AND SPACING OF MASONRY WALL REINFORCING ALTERNATE HOOK DIRECTION
7. 8" CMU STEMWALL
8. #4 BAR HORZ. @ TOP AND BOTTOM OF WALL
9. #4 BARS VERT. @ 48" O.C.

NOTE
REFER TO REINFORCED MASONRY SECTION OF S0 SHEETS FOR LAP SPLICE SCHEDULE

3 CONTINUOUS EXTERIOR FOOTING
S5.0 SCALE:NTS

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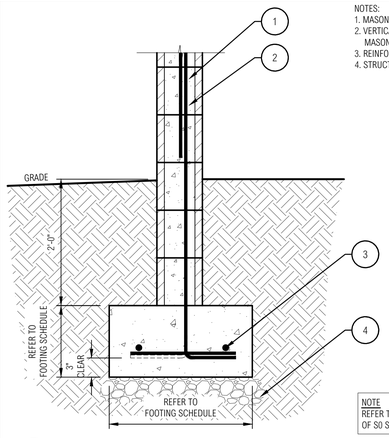
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NORTH CAROLINA PROFESSIONAL SEAL 046252 ENGINEER JEFFREY M. HEDMAN

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TITLE SHEET
STRUCTURAL DETAILS

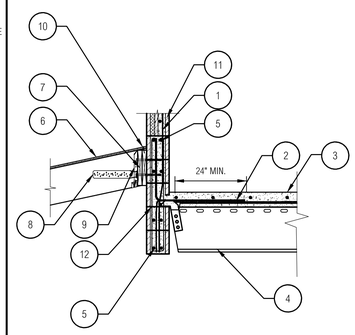
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NOTES:
1. MASONRY COLUMN PER PLAN
2. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
3. REINFORCEMENT PER FOOTING SCHEDULE
4. STRUCTURAL FILL PER SOILS REPORT

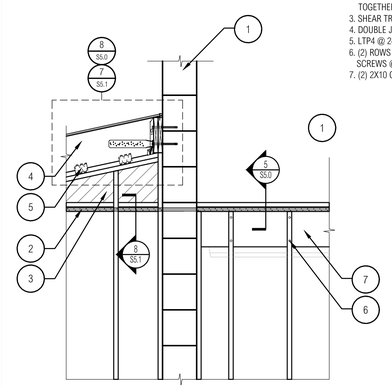
NOTE
REFER TO REINFORCED MASONRY SECTION OF S0 SHEETS FOR LAP SPLICE SCHEDULE

10 S5.1 SPOT FOOTING FOR MASONRY COLUMN
SCALE:NTS



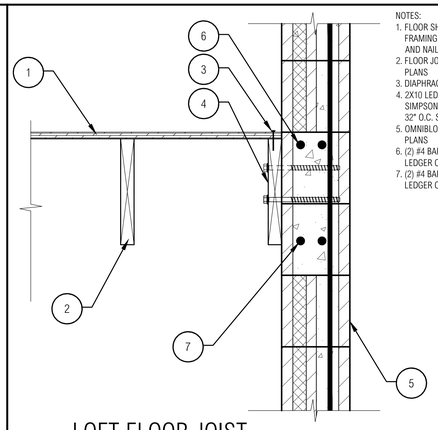
NOTES:
1. VERTICAL REINFORCING PER MASONRY WALL SCHEDULE
2. #3 BARS @ 16" O.C.WITH ACI STANDARD HOOKS ALTERNATE HOOK DIRECTION EXTEND 24" INTO SLAB
3. CONCRETE SLAB PER FRAMING PLAN
4. SPEEDFLOOR JOIST PER FRAMING PLAN
5. CONT. LINTEL REINFORCING PER PLAN
6. ROOF SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
7. (2) 2X12 LEDGER W/ (2) ROWS OF 1/2"ØX8" SIMPSON TITEN HD ANCHORS @ 32" O.C. STAGGERED
8. LTTP2 W/ 3/4" ØX8" SIMPSON TITEN HD ANCHORS @ 48" O.C.
9. LRU210Z HANGER EA JOIST
10. DIAPHRAGM OF EDGE NAILING
11. OMNIBLOCK WALL PER FRAMING PLAN
12. LINTEL STIRRUPS PER PLAN

7 S5.1 SPEEDFLOOR JOIST BEARING ON EXT WALL
SCALE: NTS



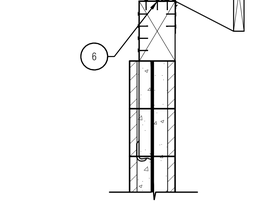
NOTES:
1. OMNIBLOCK WALL PER FRAMING PLAN
2. COIL STRAP PER PLAN, TIE WALLS TOGETHER
3. SHEAR TRANSFER BLOCKING PER 1/S1.0
4. DOUBLE JOIST OVER WALL
5. LTP4 @ 24" O.C.
6. (2) ROWS OF 1/4"X4-1/2" SIMPSON SDS SCREWS @ 16" O.C.
7. (2) 2X10 CONT. BLOCKING

4 S5.1 SPEEDFLOOR JOIST BEARING ON EXT WALL
SCALE: NTS



NOTES:
1. FLOOR SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
2. FLOOR JOISTS PER FRAMING PLANS
3. DIAPHRAGM EDGE NAILING
4. 2X10 LEDGER W/ 5/8"ØX6" SIMPSON TITEN HD ANCHORS @ 32" O.C. STAGGERED
5. OMNIBLOCK WALL PER FRAMING PLANS
6. (2) #4 BARS CONT ABOVE LEDGER CONNECTION
7. (2) #4 BARS CONT. BELOW LEDGER CONNECTION

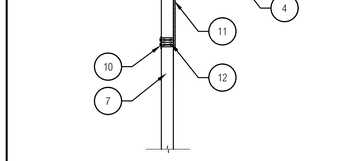
LOFT FLOOR JOIST PARALLEL TO EXTERIOR BEARING WALL
1 S5.1 SCALE:NTS



NOTES:
1. DOUBLE WALL POLYCARBONATE DECKING,BY OTHERS WATERPROOFING AS REQUIRED PER MANUFACTURER
2. 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS @ 12" O.C.
3. 2X CONTINUOUS SOLID BLOCKING
4. SIMPSON A35 CLIPS @ 24" O.C.
5. ROOF JOISTS PER FRAMING PLANS
6. BEAM PER FRAMING PLAN
7. SIMPSON VPA2 EACH JOIST

NOTE
REFER TO REINFORCED MASONRY SECTION OF S0 SHEETS FOR LAP SPLICE SCHEDULE

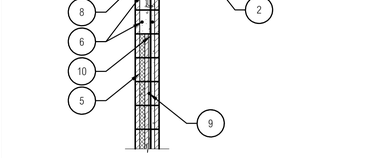
11 S5.1 WOOD BEAM ON MASONRY COLUMN
SCALE:NTS



NOTES:
1. ROOF SHEATHING REFER TO ROOF DIAPHRAGM SCHEDULE FOR THICKNESS AND NAILING REQUIREMENTS
2. EDGE NAILING OVER BLOCKING
3. 2X12 BLOCKING @ 16" O.C. OUT ONE JOIST BAY
4. ROOF JOIST PER FRAMING PLAN
5. DIAPHRAGM EDGE NAILING
6. DOUBLE ROOF JOIST ON WALL
7. WOOD FRAMED WALL PER FRAMING PLAN
8. DOUBLE WALL POLYCARBONATE DECKING BY OTHERS, WATERPROOFING AS REQUIRED BY MANUFACTURER
9. 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS @ 12" O.C.
10. COIL STRAP PER PLAN
11. SHEAR TRANSFER BLOCKING PER 1/S1.0

NOTE
REFER TO MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

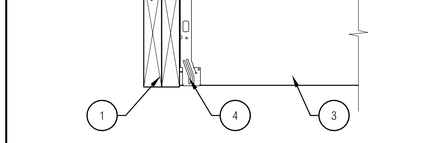
8 S5.1 ROOF TRUSS ON BEARING WALL
SCALE: NTS



NOTES:
1. DOUBLE WALL POLYCARBONATE DECKING BY OTHERS, WATERPROOFING AS REQUIRED BY MANUFACTURER
2. ROOF JOIST PER FRAMING PLAN
3. 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS @ 12" O.C.
4. ROOF JOIST ON WALL
5. OMNIBLOCK WALL PER FRAMING PLAN
6. (2) #4 BARS CONT. IN TOP TWO COURSES
7. A35 CLIPS @ 24" O.C.
8. 2X6 DF#2 TOP PLATE W/ 5/8"Ø X 10" ANCHOR BOLTS @ 24" O.C.
9. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
10. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE

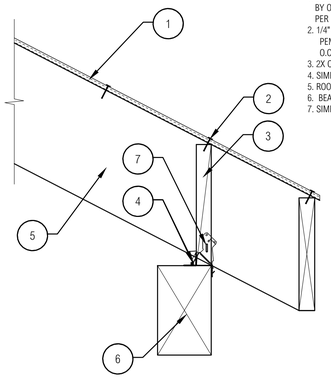
NOTE
REFER TO MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

5 S5.1 ROOF JOIST PARALLEL W/ WALL
SCALE: NTS



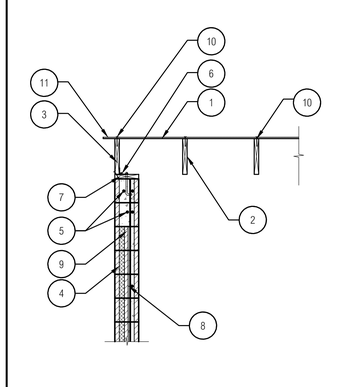
NOTES:
1. BEAM PER FRAMING PLAN
2. FLOOR SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
3. FLOOR JOISTS PER FRAMING PLAN
4. SIMPSON LUS28 HANGER EA. JOIST
5. DIAPHRAGM EDGE NAILING

2 S5.1 FLOOR JOISTS HANGING ON FLUSH BEAM
SCALE: NTS



NOTES:
1. DOUBLE WALL POLYCARBONATE DECKING, BY OTHERS WATERPROOFING AS REQUIRED PER MANUFACTURER
2. 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS @ 12" O.C.
3. 2X CONTINUOUS SOLID BLOCKING
4. SIMPSON A35 CLIPS @ 24" O.C.
5. ROOF JOISTS PER FRAMING PLANS
6. BEAM PER FRAMING PLAN
7. SIMPSON VPA2 EACH JOIST

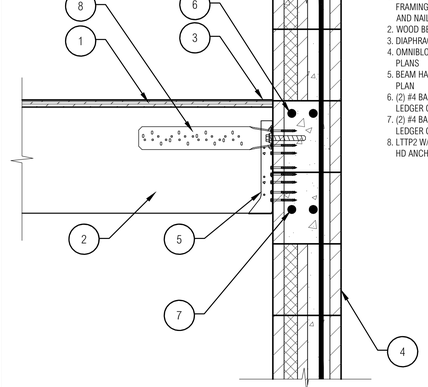
ROOF JOISTS BEARING ON WOOD BEAM
12 S5.1 SCALE: NTS



NOTES:
1. DOUBLE WALL POLYCARBONATE DECKING, BY OTHERS WATERPROOFING AS REQUIRED PER MANUFACTURER
2. ROOF JOIST PER FRAMING PLAN
3. 2X12 RIM JOIST
4. OMNIBLOCK WALL PER PLAN
5. (2) #4 BARS CONT. IN TOP TWO COURSES
6. A35 CLIPS @ 24" O.C.
7. 2X6 DF#2 TOP PLATE W/ 5/8"Ø X 10" ANCHOR BOLTS @ 24" O.C.
8. HORIZONTAL REINFORCEMENT PER MASONRY WALL SCHEDULE
9. VERTICAL REINFORCEMENT PER MASONRY WALL SCHEDULE
10. 1/4" SIMPSON SDS SCREWS W/ 2-1/2" PENETRATION INTO ROOF JOISTS @ 12" O.C.
11. MAX OVERHANG PER MANUFACTURER REQUIREMENTS

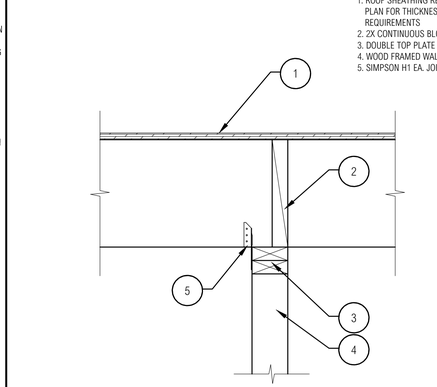
NOTE
REFER TO MASONRY SECTION OF S0.10 FOR LAP SPLICE SCHEDULE

ROOF TRUSS ON EXTERIOR BEARING WALL
9 S5.1 SCALE: NTS



NOTES:
1. FLOOR SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
2. WOOD BEAM PER FRAMING PLAN
3. DIAPHRAGM EDGE NAILING
4. OMNIBLOCK WALL PER FRAMING PLANS
5. BEAM HANGER PER FRAMING PLAN
6. (2) #4 BARS CONT ABOVE LEDGER CONNECTION
7. (2) #4 BARS CONT. BELOW LEDGER CONNECTION
8. LTTP2 W/ 3/4"X4 SIMPSON TITEN HD ANCHORS

LOFT FLOOR BEAM ON EXTERIOR BEARING WALL
6 S5.1 SCALE:NTS



NOTES:
1. ROOF SHEATHING REFER TO FRAMING PLAN FOR THICKNESS AND NAILING REQUIREMENTS
2. 2X CONTINUOUS BLOCKING
3. DOUBLE TOP PLATE
4. WOOD FRAMED WALL PER FRAMING PLANS
5. SIMPSON H1 EA. JOIST

3 S5.1 FLOOR JOISTS ON BEARING WALL
SCALE: NTS

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WRIGHT RESIDENCE
OMNIBLOCK

PROJECT ADDRESS
63 STAR DR. LEICESTER TOWNSHIP
BUNCOMBE COUNTRY, NC

PROJECT NUMBER
22370

CLIENT
THOMAS WRIGHT

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NORTH CAROLINA PROFESSIONAL SEAL 046252 ENGINEER JEFFREY W. HEDMAN

DRAWN BY:
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TITLE SHEET
STRUCTURAL DETAILS

SHEET
S5.1