. DESIGN CRITERI*i*

A. CODE: INTERNATIONAL BUILDING CODE, 2012 EDITION W/ 2014 GEORGIA AMMENDMENTS

B. DESIGN LOADS:	
ROOF DEAD LOAD ————————————————————————————————————	20 PS
ROOF LIVE LOAD	20 PS
MECHANICAL ROOF AREA LIVE LOAD (UNREDUCIBLE)	30 PS
GROUND SNOW LOAD-	
UNIT FLOOR DEAD LOAD	35 PS
ADDITIONAL UNIT MECHANICAL EQUIPMENT ROOM LOA	AD50 PS
UNIT FLOOR DEAD LOAD W/ HANOVER PAVERS-	50 PS
UNIT FLOOR LIVE LOAD —	40 PS
CORRIDOR DEAD LOAD ————————————————————————————————————	35 PS
CORRIDORS SERVING UNITS LIVE LOAD	40 PS
CORRIDORS SERVING ASSEMBLY LIVE LOAD	100 F
ASSEMBLY LIVE LOAD	100 F
BALCONY DEAD LOAD	35 PS
BALCONY LIVE LOAD	40 PS
STAIR LIVE LOAD ————————————————————————————————————	100 F
STORAGE AREAS LIVE LOAD	125 F

C.	WIND DESIGN CRITERIA:	
	WIND SPEED (ULTIMATE) —	-115 MPH
	EXPOSURE CATEGORY————————————————————————————————————	-EXP "B"
	ENCLOSURE CATEGORY —	- ENCLOSED
	BUILDING RISK CATEGORY —	−II (1.0)
	GUST RESPONSE FACTOR—	-0.85
	INTERNAL PRESSURE COEFFICIENT —	-+/- 0.18

		.,
D.	SEISMIC DESIGN CRITERIA:	
	SHORT PERIOD, SDS —	-0.213g
	1 SEC. PERIOD, SD1 —	- 0.148g
	SEISMIC DESIGN CATEGORY—	-C
	SEISMIC USE GROUP —	-1
	SITE CLASS———————————————————————————————————	– D
	R (LIGHT FRAMED WALLS W/ WOOD STRUCTURAL PANEL) —	-6.5
	Cd (LIGHT FRAMED WALLS W/ WOOD STRUCTURAL PANEL)	- 4.0
	BASIC STRUCTURAL AND SEISMIC RESISTING SYSTEM:	
	1. EQUIVALENT LATERAL FORCE PROCEDURE. LIGHT FRAMED WALLS	

BUILDING BAS	E SHEARS:	
BUILDING 1		227.2 kip
BUILDING 2		98.9 kips
BUILDING 3		29.2 kips
BUILDING 4		75.0 kips
		ı

2. GENERAL

- A. THE FOLLOWING SPECIFICATIONS ARE AN OUTLINE OF MINIMUM MATERIAL REQUIREMENTS AND THEIR APPLICATION. MANUFACTURER SPECIFICATION AND LOCAL CODE REQUIREMENTS, WHEN IN EXCESS OF MINIMUM SPECIFICATION, SHALL CONTROL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND SUBMIT ALL SHOP DRAWINGS AND REPORT ALL DOCUMENT DISCREPANCIES TO THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR ERECTION.
- B. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
- C. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND
- D. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- E. WHERE A SECTION IS CUT ON THE DRAWINGS, IT SHALL APPLY AT ALL LIKE OR SIMILAR CONDITIONS U.N.O.
- F. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING: a. SIZE & LOCATION OF ALL DOOR & WINDOW OPENINGS
- b. SIZE & LOCATION OF ALL ROOF OPENINGS. c. FLOOR AND ROOF FINISHES.

W/ WOOD STRUCTURAL PANELS

- d. DETAILS OF VENEER ATTACHMENT. e. LOC'N & EXTENT OF INSULATION.
- G. SEE MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS FOR THE FOLLOWING
- a. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC.
- b. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. c. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
- d. UNDERGROUND CONCRETE DUCTS, TRENCHES, PITS OR MANHOLES. e. CONCRETE AND ASPHALT PAVEMENT
- H. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ALL MEANS AND METHODS OF OF CONSTRUCTION AND SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN OR OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR EARTH BANKS, FORMS, SCAFFOLDING, PLANKING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES, ETC. MODIFICATION OR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
- J. ALL CONNECTOR TYPES REFER TO SIMPSON STRONG-TIE SPECIFICATIONS. ANY CHANGE, MODIFICATION OR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

3. CONCRETE

- A. CONCRETE PROTECTION FOR REINFORCEMENT OF POURED-IN-PLACE MEMBERS: (SEE SECTION 7.7 ACI 318 LATEST EDITION).
- B. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I.
- C. REFER TO ARCHITECTURAL DRAWINGS FOR CLIPS, GROOVES, GROUNDS, ETC., TO BE CAST IN CONCRETE AND CONCRETE FINISHES.
- D. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- E. SLEEVE PLUMBING OPENINGS IN SLABS BEFORE PLACING CONCRETE AND BEND REINFORCING AROUND SLEEVES. CORING NOT PERMITTED IN FLOOR SLABS, UNLESS APPROVED BY STRUCTURAL ENGINEER.
- F. ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE AS FOLLOWS: FOOTINGS/ GRADE BEAMS/ PILE CAPS/ TIE BEAMS————————————————3000 PSI SLAB ON GRADE-PILASTERS, COLUMNS, BASEMENT & CANTILEVERED RETAINING WALLS & RETAINING WALL FOOTINGS———
- G. CONCRETE SLUMP SHALL BE 3" TO 5" AT TIME OF PLACEMENT.
- H. CONCRETE MIX DESIGNS SHALL BE ESTABLISHED BY THE SUPPLIER IN ACCORDANCE WITH ACI 318-08. MIX DESIGNS SHALL BE SUBMITTED WITH BACK-UP DATA PER ACI 318-08 TO THE ARCHITECT FOR REVIEW PRIOR TO CONCRETE PLACEMENT.
- J. ALL CONCRETE EXPOSED TO THE WEATHER SHALL CONTAIN 5 TO 7% ENTRAINED AIR.
- K. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318, ACI 318.1 AND ACI 301. CONCRETE TEST REPORTS SHALL BE AVAILABLE AT JOB SITE.
- L. LIGHTWEIGHT CONCRETE IS DEFINED AS CONTAINING LIGHTWEIGHT AGGREGATE AND HAVING

4. REINFORCING STEEL

- A. REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615,
- B. CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI 318-08, SECTION 7.7 UNLESS SPECIFICALLY DETAILED OTHERWISE ON THE DRAWINGS.
- C. ALL REINFORCING BAR BENDS TO BE MADE COLD.

A MAXIMUM EQUILIBRIUM DENSITY OF 115 PCF.

- D. CONTRACTORS SHALL NOT PLACE ANY REINFORCING UNTIL APPROVED SHOP DRAWINGS ARE RECEIVED ON THE JOB.
- E. BARS SHALL BE IN CONTACT WHEN FORMING A LAP SPLICE, UNLESS NOTED OTHERWISE. F. PROVIDE CORNER BARS @ ALL TURN-DOWN SLAB CORNERS AND C.I.P. CONCRETE WALL CORNERS. PROVIDE 30" LAP BETWEEN CORNER BARS AND MAIN REINFORCING.
- G. WELDED WIRE FABRIC SHALL CONFORM TO ASTM-A185.
- H. REINFORCING STEEL MARKED "CONTINUOUS" SHALL BE LAPPED W/ CLASS "B" LAP SPLICE UNLESS SPECIFICALLY DETAILED OTHERWISE. LAP WELDED WIRE MESH ONE FULL MESH AT SIDE AND END LAPS.

5. FOUNDATION

- A. FOUNDATION DESIGN IS BASED ON "GEOTECHNICAL EXPLORATION, CIRCLE 75 MULTIFAMILY DEVELOPMENT, PHASE II CIRCLE 75 PARKWAY AND CRESCENT PARK DRIVE, COBB COUNTY, GEORGIA" PERFORMED BY UNITED CONSULTING AND DATED JULY 28, 2015 PROJ NUMBER 2013.3927.02. FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 3,000 PSF.
- B. CONTRACTOR TO PROVIDE FOR DE-WATERING IN EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.
- C. CONTRACTOR SHALL PROVIDE AND INSTALL ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN THE EARTH BANKS.
- D. CONTRACTOR SHALL PROTECT ALL UTILITY LINES, ETC. ENCOUNTERED DURING EXCAVATION AND BACKFILLING.
- E. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED, BUT NOT BEFORE CONCRETE HAS ATTAINED FULL DESIGN STRENGTH.
- F. ALL NON-CANTILEVER BASEMENT WALL AND FOUNDATION WALLS SHALL BE LATERALLY SHORED UNTIL SLAB ON GRADE AT TOP OF WALL HAS BEEN PLACED & GAINED 75% DESIGN STRENGTH.
- G. CONTRACTOR SHALL OBTAIN A COPY OF THE ABOVE REFERENCED SOILS REPORT AND COMPLY WITH ITS RECOMMENDATIONS.
- H. FOUNDATION WALLS, RETAINING WALLS & BASEMENT WALLS HAVE NOT BEEN DESIGNED FOR CONSTRUCTION EQUIPMENT SURCHARGE. WHERE CONSTRUCTION EQUIP. SURCHARGES WALLS, WALLS SHALL BE SHORED AS REQUIRED.
- J. THE SOILS ENGINEER OF RECORD SHALL CERTIFY IN WRITING THAT ALL FOUNDATIONS WERE PLACED AND COMPLETED AS SPECIFIED.
- K. UNDER SLAB DRAINAGE SYSTEMS, IF REQUIRED, ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. DRAINAGE SYSTEMS SHALL BE PROVIDED AS DETERMINED AND RECOMMENDED BY THE GEOTECHNICAL ENGINEER OF RECORD.
- L. RETAINING WALL DRAINAGE SYSTEMS ARE NOT SHOWN ON THE STRUCTURAL DWGS. SEE ARCH & CIVIL DWGS FOR DRAINAGE SYSTEM INFO.
- M. RETAINING WALL DRAINAGE SYSTEMS ARE NOT SHOWN ON THE STRUCTURAL DWGS. SEE ARCH & CIVIL DWGS FOR DRAINAGE SYSTEM INFO.

SOLID SAWN & LAMINATED LUMBER

- A. ALL LUMBER SHALL BE VISUALLY GRADED, SOUTHERN PINE DIMENSION LUMBER, SEASONED AND WITH 19 % MAX. MOISTURE CONTENT, U.N.O., AND IN ACCORDANCE WITH THE FOLLOWING MINIMUM GRADE REQUIREMENTS: -SEE STUD SCHEDULE —STRUCT. GRADE NO. BEAMS (2"-4" THICK)———— -STRUCT, GRADE NO. 2 ---STRUCT. GRADE NO. 2 -STRUCT. GRADE NO. 3
- B. GRADES SHALL BE DETERMINED IN ACCORDANCE WITH SPIB GRADING RULES AGENCY.
- C. BRACE STUD WALLS UNTIL ALL PLYWOOD DECKING, ROOF TRUSSES, AND SHEAR PANELS ARE IN PLACE
- D. USE PRESSURE TREATED WOOD WITH ALKALINE COPPER QUAT (ACQ) OR COPPER AZOLE (CBA) FOR ALL EXPOSED LUMBER AND WITH ACQ, CBA OR SODIUM BORATES (SBX FOR SILL PLATES IN CONTACT WITH CONCRETE. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIP GALVANIZED PER ASTM A153. ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIP GALVANIZED PER ASTM A653 AND MADE FROM CLASS G185 SHEET WITH 1.85 OUNCES MINIMUM OF ZINC COATING PER SQUARE FOOT.
- E. ALL SILL PLATES SHALL BE ANCHORED TO MASONRY OR CONCRETE FOUNDATIONS WITH 1/2" & A307 GRADE A.B.'S ⊚ 48" O.C. MAX. WITH 7" MIN. EMBEDDMENT (U.N.O.) SEE NOTE 6-D FOR ADD'L. REQ'S. INTERIOR SILL PLATES MAY BE ANCHORED WITH HILTI DS 72 P10 POWDER ACTUATED FASTENERS @ 18" O.C. MAX. PROVIDE PINS AT 6" AND 10" FROM ENDS OF PLATE WITH 2 PINS MIN. IN ANY PLATE. SEE NOTE 6-D FOR ADD'L REQ'S.
- F. HANDRAILS, GUARDRAILS AND STAIRWAYS INCLUDING ALL COMPONENTS AND THEIR CONNECTIONS SHALL BE DESIGNED BY THE SUPPLIER IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.
- G. INSTALL BEAMS WITH CROWN UP.
- H. ALL LVL MEMBERS SHALL BE (MIN.): Fb=2600 psi., Fv=285 psi. & E=1,900,000 psi.
- J. ALL PSL COLUMNS SHALL BE (MIN.): Fb=2400 psi., Fv=190 psi. & E=1,800,000 psi. ALL PSL BEAMS SHALL BE (MIN.): Fb=2900 psi., Fv=290 psi. & E=2,000,000 psi.
- K. THE NUMBER OF WALL STUDS AT BEARING POINTS OF 2X MEMBER BEAMS SHALL MATCH THE NUMBER OF MEMBERS IN THE BEAM (U.N.O.). ALL LVL AND PSL BEAMS SHALL HAVE A (3) STUD MIN. BEARING (U.N.O.). THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS.

7. WOOD TRUSSES

- A. ALL TRUSS CONNECTOR PLATES SHALL BE MANUFACTURED FROM ASTM A446-72 GRADE A GALVANIZED STEEL OF NO LESS THAN 20 GAUGE THICKNESS WITH A MINIMUM YIELD OF 33,000 psi AND AN ULTIMATE TENSILE STRENGTH OF 45,000 psi. CONNECTOR PLATE GAUGES SHALL BE AS REQUIRED BY MANUFACTURERS DESIGN CALCULATIONS.
- B. TRUSS SHOP DRAWINGS SHALL BE SUBMITTED FOR THE ARCHITECTS REVIEW PRIOR TO
- FABRICATION AND SHALL INCLUDE THE FOLLOWING: 1. STRESS REDUCTION FACTORS USED FOR PLATES
- 2. TOP AND BOTTOM CHORD DESIGN LOADS IN P.L.F.
- 3. SIZE, GAUGE, AND EXACT LOCATION BY DIMENSION OF PLATES 4. LUMBER SPECIES AND GRADES USED
- 5. SEAL AND SIGNATURE OF TRUSS COMPANY ENGINEER IN RESPONSIBLE CHARGE ON
- ALL TRUSS ENGINEERED SHEETS OR DRAWINGS 6. NAME AND TRADEMARK OF PLATE MANUFACTURER AND TRUSS FABRICATOR AS WELL
- AS PROJECT NAME AND LOCATION
- 7. UNIFORM, LATERAL AND CONCENTRATED LOAD REQUIREMENTS AS NOTED ON PLANS AND/OR CORRESPONDING DETAILS
- 8. ALL TRUSS CONNECTION HARDWARE REQUIREMENTS 9. ALLOWABLE LOADS FOR STRESS GRADE LUMBER AND PLATES AS ALLOWED BY S.B.C.C.I. AND I.C.B.O. INCLUDING I.C.B.O. REPORT NUMBER
- C. FIELD REPAIR OF DAMAGED TRUSSES MUST BE APPROVED IN WRITING BY THE TRUSS
- ENGINEER AND ENGINEER OF RECORD. D. ALL ROOF TRUSS BEARING WALLS SHALL HAVE METAL FASTENERS TO RESIST UPLIFT
- FORCES AS NOTED ON ROOF FRAMING PLANS. E. TRUSS SUPPLIER IS TO PROVIDE PLAN AND PROCEDURES FOR INSTALLING, SECURING AND BRACING OF ALL TRUSSES
- F. TRUSS SUPPLIER SHALL PROVIDE TRUSS BLOCKS CAPABLE OF TRANSFERRING LATERAL LOADS AS NOTED ON PLANS AND/OR DETAILS
- G. APPROVED TRUSS PLANS SHALL BE AVAILABLE ON JOB SITE DURING TIMES OF
- H. TRUSS MANUFACTURER TO PROVIDE OR ALIGN TRUSS ABOVE ALL SHEAR WALLS AS
- I. TRUSS MANUFACTURER TO COORDINATE WITH MECH. / PLUMBING DWGS. FOR ADDITIONAL CONCENTRATED LOADS DUE TO DOMESTIC WATER AND SPRINKLER PIPE SUPPORTS.
- J. TRUSS MANUFACTURER SHALL COORDINATE TRUSS LAYOUT WITH MECH/PLUMBING DRAWINGS TO ALLOW ALL PIPES AND DUCTS ADEQUATE SPACE FOR PROPER INSTALLATION.
- K. TRUSSES TO BE DESIGNED FOR LIVE LOAD DEFLECTION OF L/480 AND TOTAL LOAD DEFLECTION OF L/300.

8. LATERAL LOAD RESISTING SYSTEM

- A. ROOF DECK AND SUBFLOORS ARE DESIGNED AS UNBLOCKED DIAPHRAGMS. 1. ROOF SHEATHING SHALL BE 23/32" THICK EXPOSURE 1 RATED O.S.B. WITH A 48/24 PANEL SPAN INDEX (U.S.) AND BEAR THE TRADEMARK STAMP OF THE AMERICAN PLYWOOD ASSOC. (APA) PANELS SHALL BE NAILED WITH 8d NAILS @ 6" OC AT ALL PANEL EDGES AND 12" O.C. AT ALL INTERIOR SUPPORTS AND INSTALLED W/STEEL TECO CLIPS PER MANUF. RECOMMENDATIONS & CODE REQ'S. 2. FLOOR SHEATHING SHALL BE 23/32" THICK T & G EXPOSURE 1 RATED O.S.B. WITH A 48/24 PANEL SPAN INDEX (U.S.) AND BEAR THE TRADEMARK STAMP OF THE AMERICAN PLYWWOD ASSOC. (APA). PANELS SHALL BE NAILED WITH 10d NAILS @
- B. STRUCTURAL PANEL SHEAR WALLS SHALL BE 15/32" THICK EXPOSURE 1 RATED WALL PANEL SPAN INDEX (U.S.) AND BEAR THE TRADEMARK STAMP THE AMERICAN PLYWOOD ASSOC. (APA). PANELS SHALL BE NAILED IN ACCORDANCE WITH SHEAR WALL SCHEDULE ON S4-00.

6" OC AT ALL PANEL EDGES AND 12" OC AT ALL INTERIOR SUPPORTS.

- C. REFER TO BRACING PLANS FOR TYPE AND LOCATION OF ALL SHEARWALLS AND HOLD DOWN OF ANCHORS. REFER TO SHEET S4-00 FOR EXPLANATION AND MINIMUM FASTENER REQUIREMENTS FOR ALL SHEARWALL TYPES AND HOLD DOWN ANCHORS.
- D. FRAMING DETAILS INCORPORATE MINIMUM REQUIREMENTS FOR LATERAL LOAD TRANSFER. ANY CHANGE, MODIFICATION OR SUBSTITUTE FOR MATERIALS (INCLUDING GRADE OR SPECIES) OR FASTENERS MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO
- E. ALL CONNECTOR TYPES REFER TO SIMPSON STRONG-TIE SPECIFICATIONS. ANY CHANGE, MODIFICATION OR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

9. MASONR

- A. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (F'm) SHALL BE 1500 PSI.
- B. MATERIAL SHALL BE AS FOLLOWS: CMU——GRADE N, ASTM C-90 (UNIT STRENGTH = 1900 PSI) MORTAR—TYPE S FOR WALLS NOT IN CONTACT WITH EARTH TYPE M FOR WALLS IN CONTACT WITH EARTH
- C. GROUT FOR CONCRETE MASONRY WALL SHALL CONFORM TO ASTM C476, f'c = 3,000 PSI MIN. GROUT SHALL BE CONSOLIDATED BY THOROUGHLY RODDING ALL CELLS.
- D. GROUT PLACEMENT SHALL BE LOW-LIFT. THE CONSTRUCTION JOINTS ARE CREATED BY THE LEVEL OF GROUT STOPPING AT 1-1/2" FROM TOP OF MASONRY AND THE STEEL REINFORCING PROJECTING ABOVE THE TOP COURSE FOR A SUFFICIENT HEIGHT TO PROVIDE A LAP AT THE SPLICE OF 48 BAR DIAMETERS. THE CONSTRUCTION JOINT SHALL BE LOCATED 3'-0" MINIMUM FROM TOP AND BOTTOM OF STRUCTURAL ELEMENTS SUCH AS SLABS, ROOFS, ETC.
- E. CONCRETE MASONRY WALLS SHALL BE TEMPORARILY BRACED DURING ERECTION. REMOVE TEMPORARY BRACING ONLY AFTER WALLS ARE CONNECTED TO SUPPORTING ELEMENTS.
- F. ALL CONCRETE BLOCK BELOW GRADE SHALL HAVE ALL CELLS FILLED WITH GROUT.
- G. ALL CELLS CONTAINING REINFORCEMENT SHALL BE GROUTED SOLID.
- H. MAXIMUM CONTROL JOINT SPACING IN MASONRY WALL = 25'-0" UNLESS NOTED. SEE ARCHITECTURAL DRAWINGS FOR LOCATION.
- J. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL CMU WALLS SHALL BE REINFORCED AS FOLLOWS: 1. VERT. REINF. SEE 15/S6-21
- CONTINUOUS BOND BEAM REINF W/2-#5 CONT @ ALL FLOOR LEVELS, @ TOP OF WALL AND @ SLAB ON GRADE ELEVATION. CONTINUOUS 9 GA. TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT
- K. DOWEL ALL CMU MASONRY WALLS INTO GRADE BEAMS, ELEVATED CONCRETE SLABS, AND CONCRETE FOUNDATION WALLS. DOWELS SHALL HAVE STANDARD HOOKS AND MINIMUM FOOTING EMBEDMENT OF 9". DOWELS SHALL BE OF SUFFICIENT LENGTH TO PROVIDE 48 BAR DIAMETER LAP WITH VERTICAL REINFORCING, DOWELS SHALL BE OF SAME SIZE AND LOCATION AS VERTICAL WALL REINFORCING.
- L. SEE ARCHITECTURAL DRAWINGS FOR ALL C.M.U. WALL OPENING SIZES AND LOCATIONS.
- M. ALL C.M.U. SHALL BE PLACED IN RUNNING BOND.

AT 16" O.C. VERTICALLY.

- N. ALL MASONRY CONSTRUCTION AND INSPECTION SHALL COMPLY WITH ACI 530-08 & ACI 530.1-08
- O. ALL CONCRETE MASONRY CONSTRUCTION SHALL BE INSPECTED AND TESTED PER THE REQT'S OF ACI 530.1-11. COSTS OF THE SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM TESTING AND INSPECTION SERVICES SHALL BE BORNE BY THE CONTRACTOR.
- P. CMU GROUT FILL SHALL ARRIVE AT THE JOB SITE WITH A SLUMP BETWEEN 3" TO 5". PRIOR TO DEPOSITING GROUT, SUPERPLASTICIZER SHALL BE ADDED TO THE GROUT AT THE JOB SITE INCREASING THE SLUMP TO 8" TO 10".
- Q. CMU WALL REINFORCING SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION. DRAWINGS SHALL SHOW ALL WALL AND PILASTER REINFORCING IN PLAN AND IN ELEVATION.
- R. PROVIDE CORNER BARS AT ALL BOND BEAMS TO ENSURE CONTINUITY AT CORNERS. LAP CORNER BARS 48 BAR DIAMETERS WITH BOND BEAM BARS.
- S. PROVIDE BAR SUPPORTS AND POSITIONERS AS REQUIRED TO ENSURE THAT FINAL IN-PLACE LOCATION OF REINFORCING IS AS INDICATED ON THE DRAWINGS.
- T. MASONRY SHALL BE PROTECTED FROM FREEZING DURING PLACEMENT& CURING. COLD WEATHER MASONRY PROCEDURES SHALL COMPLY W/ACI 530-08 & ACI 530.1-08.
- U. THE GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL BRACING AND SHORING FOR

ALL MASONRY WALLS AS REQUIRED TO ENSURE STABILITY DURING CONSTRUCTION.

<u> 10. STRUCTURAL STEEL</u>

24" DEEP----

- A. STRUCTURAL STEEL DETAILING, FABRICATION AND ERECTION SHALL BE DONE IN ACCORDANCE WITH THE A.I.S.C. MANUAL OF STEEL CONSTRUCTION (9TH EDITION). ALL CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED EXCEPT AS NOTED ON DRAWINGS. FIELD BOLTS SHALL BE 3/4" DIA. A.S.T.M. A325 BEARING TYPE BOLTS WITH THREADS INCLUDED IN THE SHEAR PLANE (UNLESS NOTED). ALL FIELD WELDING SHALL BE DONE WITH E-70XX ELECTRODES.
- B. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING: W SHAPES-----ASTM A992 HSS SHAPES ----—ASTM A500, GR B PLATES, ANGLES, CHANNELS-—ASTM, A36
- C. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS AND SHALL CONFORM TO THE "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION", LATEST EDITION.
- D. THE GENERAL CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, FOR REVIEW, ENGINEERED AND CHECKED SHOP DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS AND ERECTION DRAWINGS FOR ALL STRUCTURAL STEEL.
- E. ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE FABRICATOR. DETAILING SHALL BE PERFORMED USING RATIONAL ENGINEERING DESIGN AND STANDARD PRACTICE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE GENERAL DETAILS SHOWN ON THE DRAWINGS ARE CONCEPTUAL ONLY AND DO NOT INDICATE THE REQUIRED NUMBER OF BOLTS OR WELD SIZES, UNLESS SPECIFICALLY NOTED.
- F. ALL CONNECTIONS SHALL BE SIMPLE SHEAR CONNECTIONS UTILIZING HIGH-STRENGTH BOLTS IN BEARING-TYPE CONNECTIONS (UNO) WITH THREADS INCLUDED IN THE SHEAR
- G. NON-COMPOSITE BEAM CONNECTIONS SHALL BE DESIGNED FOR THE REACTION DUE TO MAXIMUM ALLOWABLE LOAD FOR THE APPROPRIATE SPAN AND SHAPE BASED ON THE BEAM TABLES OF THE A.I.S.C. MANUAL OF STEEL CONSTRUCTION (13TH EDITION).
- H. MINIMUM NUMBER OF BOLT ROWS BASED ON MEMBER DEPTH FOR W & C SHAPES ARE AS FOLLOWS: UP TO 12" DEEP—————————————————2 ROWS ——4 ROWS
- I. ALL SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION AS PER THE REQUIREMENTS OF THE A.I.S.C. CODE SECTION ON UNRESTRAINED MEMBERS, SECTION
- J. ALL BEAMS AND GIRDERS SHALL BE FABRICATED WITH NATURAL CAMBER UP. K. AFTER FABRICATION, ALL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE
- AND OTHER FOREIGN MATERIALS. L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION

PROCEDURES AND SEQUENCES WITH RELATION TO TEMPERATURE DIFFERENTIALS.

- M. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR APPROVAL OF THE ARCHITECT.
- N. ALL ADDITIONAL STEEL REQUIRED BY THE CONTRACTOR FOR ERECTION PURPOSES AND SITE ACCESS OF STOCKPILED MATERIALS SHALL BE PROVIDED AT NO COST TO THE OWNER. ALL SUCH ADDITIONAL STEEL SHALL BE REMOVED BY THE CONTRACTOR.
- O. ALL STEEL EXPOSED TO EARTH SHALL BE PAINTED WITH BITUMINOUS COATING. ALL STRUCTURAL STEEL EXPOSED TO THE WEATHER SHALL BE SHOP PRIMED & FIELD PAINTED W/TWO COATS OF PAINT.
- P. ALL WELDED JOINTS SHALL COMPLY W/ THE PROVISIONS OF AWS D1.1. STRUCTURAL WELDING CODE BY AMERICAN WELDING SOCIETY (SECTION 2207). THE GC SHALL MAKE PROOF OF WELDER CERTIFICATION AVAILABLE AT THE JOB SITE.

11. NAILING

DOUBLE TOP PLATE

STDS TO SOLE PLATE

SOLE PLATE TO JOIST OR BLOCKING

REQUIRED COMMON NAIL SIZES			
PENNY WEIGHT	DIAMETER	LENGTH	
8d	.131"	2½"	
10d	.148"	3"	
16d	.162"	3½"	

<u>CONNECTIONS</u> <u>FASTENER</u>

TYPICAL FRAMING CONNECTION BRIDGING TO JOIST TOE NAIL EACH END 2-8d COMMON 1X6 SUBFLOOR OR LESS TO EACH JOIST FACE NAIL 2-8d COMMON 1" BRACE TO EACH STUD AND PLATE FACE NAIL 2-8d COMMON

1X8 SHEATHING OR LESS TO EACH BEARING FACE NAIL 2-8d COMMON JOIST TO SILL OR GIRDER TOE NAIL 3-8d COMMON OVER 1X6 SUBFLOOR TO EACH JOIST FACE NAIL 3-8d COMMON CEILING JOISTS TO PLATE TOE NAIL 3-8d COMMON CONTINUOUS HEADER TO STUD TOE NAIL 3-8d COMMON RAFTER TO PLATE TOE NAIL 3-8d COMMON

OVER 1X8 SHEATHING TO EACH BEARING FACE NAIL 3-8d COMMON

STUD SOLE PLATE TOE NAIL 4-8d COMMON BAND JOIST TO SILL OR TOP PLATE TOE NAIL 8d COMMON @ 6" OC. DOUBLE STUDS FACE NAIL 10d COMMON @ 12" O.C. STAGGERED EA. FACE

BLIND & FACE NAIL 2-16d COMMON 2" SUBFLOOR TO JOIST OR GIRDER TOP OR SOLE PLATE TO STUD END NAIL 2-16d COMMON JOIST TO AND JOIST FACE NAIL 3-16d COMMON LEDGER STRIP 3-16d COMMON @ EACH JOIST 2" PLANKS 2-16d COMMON @ EACH BEARING

FACE NAIL 10d COMMON @ 16" O.C.

END NAIL 2-16d COMMON @ EACH END

16 GA GALV WIRE STAPLES, 3/8 MIN. CROWN

@ 2 1/2" O.C. EDGES AND 4" INTERMEDIATE

OR PARTICLE BOARD THICKNESS @ 4" O.C.

8d COMMON NAIL OR 11 GA. GALV ROOFING

NAIL 1 3/4" LONG WITH 7/16" HEAD @ 3"

11 GA. GALV. 1 3/4" LONG WITH 7/16" HEAD

1 1/2" DRYWALL NAIL @ 7" O.C. ON CEILING

EDGES AND 5" O.C. INTERMEDIATE

FACE NAIL 16d COMMON @ 16" O.C.

CONTINUOUS HEADER, TWO PIECES SEE 6/S3-00 BUILT-UP CORNER STUDS 16d COMMON @ 24" O.C. TOP PLATE, LAP AND INTERSECTIONS FACE NAIL 2-16d COMMON OR 3-10d COMMON

CEILING JOISTS, LAP OVER PARTITION FACE NAIL 3-16d COMMON OR 4-10d COMMON FACE NAIL 3-16d COMMON OR 4-10d COMMON BUILT-UP GIRDER AND BEAMS, SEE 6/S3-00 OF THREE MEMBERS

WOOD STRUCTURAL PANEL SUBFLOORING 15/32", 1/2", 7/16" 6d COMMON, ANNULAR OR SPIRAL THREAD @ 6" O.C. EDGES AND 12" O.C. INTERMEDIATE 19/32" - 3/4" 8d COMMON OR 6d ANNULAR OR SPIRAL

THREAD @ 6" O.C. EDGES AND 12" INTERMEDIATE 1", 1 1/8" 10d COMMON OR 8d ANNULAR OR SPIRAL THREAD @ 6" O.C. EDGES AND 6"

INTERMEDIATE 15/32", 1/2" 16 GA GALV WIRE STAPLES, 3/8 MIN. CROWN @ 4" O.C. EDGES AND 7" INTERMEDIATE

19/32", 5/8" WOOD STRUCTURAL PANEL ROOF AND WALL SHEATHING AND PARTICLE-

BOARD WALL SHEATHING 1/2" OR LESS 6d COMMON @ 6" O.C. EDGES AND 12" O.C. INTERMEDIATE

19/32" OR GREATER 8d COMMON @ 6" O.C. EDGES AND 12" O.C. INTERMEDIATE 5/16" - 1/2" 16 GA GALV. WIRE STAPLES, 3/8" MIN. CROWN LENGTH OF 1" PLUS WOOD STRUCTURAL PANEL

EDGES AND 8" O.C. INTERMEDIATE 19/32" - 3/4" 16 GA GALV. WIRE STAPLES, 3/8" MIN. CROWN LENGTH OF 1" PLUS WOOD STRUCTURAL PANEL OR PARTICLE BOARD THICKNESS @ 2" O.C.

FIBERBOARD SHEATHING 1/2" REGULAR 6d COMMON NAIL OR 11 GA. GALV ROOFING NAIL 1 1/2" LONG WITH 7/16" HEAD @ 6" O.C. AT EDGES AND 12" O.C. AT OTHER

BEARINGS 1/2" STRUCTURAL 8d COMMON NAIL OR 11 GA. GALV. ROOFING NAIL 1 1/2" LONG WITH 7/16" HEAD @ 3" O.C. AT EDGES AND 6" O.C. AT OTHER BEARINGS

O.C. AT EDGES AND 6" O.C. AT OTHER BEARINGS GYPSUM SHEATHING 1/2" GYPSUM SHEATHING 11 GA. GALV. 1 1/2" LONG WITH 7/16" HEAD @ 4" O.C. AT EDGES AND 7" O.C. AT OTHER

@ 4" O.C. AT EDGES AND 7" O.C. AT OTHER BEARINGS 1 3/8" DRYWALL NAIL @ 7" O.C. ON CEILING GYPSUM WALLBOARD AND 7" O.C. ON WALLS

BEARINGS

AND 7" O.C. ON WALLS

PARTICLEBOARD SIDING

5/16<u>"</u> - 3 1/2"

5/8" GYPSUM SHEATHING

25/32" STRUCTURAL

1. FIBERBOARD SHEATHING MAY BE STAPLED USING 16 GA GALVANIZED STAPLES 1 1/8" LONG FOR 1/2" SHEATHING AND 1 1/2" LONG FOR 25/32" SHEATHING. STAPLES TO

OTHER BEARINGS. 2. DRYWALL NAILS SHALL CONFORM TO ASTM C514. 3. SIDING APPLIED TO 5/8" NET WOOD SHEATHING, 15/32" STRUCTURAL PANEL OR 1/2"

HAVE MINIMUM CROWN OF 7/16" AND SPACED 3" O.C. AT EDGES AND 6" O.C. AT

PARTICLE BOARD SHEATHING. 4. CORROSION RESISTANT NAILS SHALL BE USED AND SPACED 6" O.C. AT EDGE AND 8" O.C. AT INTERMEDIATE SUPPORTS. NAILS SHALL HAVE A MINIMUM EDGE DISTANCE OF

5. SIDING APPLIED TO STUDS SPACED 16" O.C. MAXIMUM.

6. SIDING APPLIED DIRECTLY TO STUDS SPACED 24" O.C. MAXIMUM.

7. USE ANNULAR OR SPIRAL THREAD NAILS FOR COMBINATION SUBFLOOR/UNDERLAYMENT. 8. FOR 1-INCH WOOD STRUCTURAL PANELS, 12" O.C. INTERMEDIATE NAILING SHALL BE 9. ALL FASTENING REQUIREMENTS SHALL COMPLY WITH THE SCHEDULE ABOVE OR PER U.L.

DESIGNS AS SPECIFIED BY THE ARCHITECT, WHICHEVER IS STRICTER.

12. STRUCTURAL ABBREVIATIONS

ADD'L, ADD ADDITIONAL

ADD L, ADD		LLV	LONG LEG VERTICAL
	ANCHOR BOLT	LOC'N	LOCATION
ARCH.	ARCHITECTURAL	M	MOMENT
@	AT	MFG, MFG'R	MANUFACTURER
BM	BEAM	MECH	MECHANICAL
BRG	BEARING	MPH	MILES PER HOUR
BLK	BLOCK	MAT'L	MATERIAL
BOT, B	BOTTOM, BOTTOM BAR	MAX	MAXIMUM
BLDG	BUILDING	MFR	MANUFACTURER
CL	CENTER LINE	MTL	METAL
CLR	CLEAR	MIN	MINIMUM
COL	COLUMN	MISC	MISCELLANEOUS
CONC	CONCRETE	NIC	NOT IN CONTRACT
CONN	CONNECTION	NO	NUMBER
CMU	CONCRETE MASONRY UNIT	NTS	NOT TO SCALE
CONST	CONSTRUCTION	0.C.	ON CENTER
CONT	CONTINUOUS	OPNG	OPENING
CONTR	CONTRACTOR	O.H.	OPPOSITE HAND
D	DEEP	Р	PAN
DSN	DESIGN	PAF	POWDER ACTUATED
FTG	FOOTING		FASTENER
DET, DTL	DETAIL	P/C	PRECAST
DIA, Ø	DIAMETER	PL	PLATE
•			
DIAG	DIAGRAM	PT	POST TENSIONED
DIM	DIMENSION	PTS	POINTS
DWG	DRAWING	PHSE	PENTHOUSE
DWL	DOWEL	PSF	POUNDS PER SQ. FOOT
EE	EACH END	PSI	POUNDS PER SQ. INCH
EF	EACH FACE	REF	REFERENCE
EW	EACH WAY	REV	REVISION
	ELEVATION	REINF	REINFORCING
ETF	ELEVATION TOP OF FOOTING	REQ'D	REQUIRED
			-
ETC	ETCETERA	REBAR	REINFORCING BAR
EQ .	EQUAL	SCHD, SCHED	
EXIST, EXT'G		SECT	SECTION
EXP	EXPANSION	SLH	SHORT LEG HORIZONTAL
EXP JT, EJ	EXPANSION JOINT	SLV	SHORT LEG VERTICAL
EXT	EXTERIOR	SL0	SHORT LEG OUT
F/	FACE OF	SIM	SIMILAR
FIN FI FFF	FINISHED FLOOR	SOG	SLAB ON GRADE
FFE FFE	FINISHED FLOOR ELEVATION	SPECS	SPECIFICATIONS
FL, FLR	FLOOR	SQ	SQUARE
FTG	FOOTING	STD	STANDARD
FT	FEET, FOOT	STIRR	STIRRUPS
FLG	FLANGE	STL, ST'L	STEEL
GA, ga	GAUGE	STRUCT	STRUCTURAL
GALV	GALVANIZED	T	TOP
Н	HEAD	THK	THICK
HK	HOOK	THRD	THREADED
HR	HOUR	THRU	THROUGH
HORIZ			TOP OF STEEL
	HORIZONTAL	1/3, 1/31L	TOP OF STEEL
INFO	INFORMATION	T/B, T/BM T/CONC	TOP OF BEAM
INT	INTERIOR		
JST	JOIST	T/SLAB	TOP OF SLAB
JT	JOINT	T/FTG	TOP OF FOOTING
K-FT	KIP-FEET	TYP	TYPICAL
K/FT	KIPS PER FOOT	UNO	UNLESS NOTED OTHERWI
K	KIPS	VERT	VERTICAL
L	ANGLE	W	WIDE
L	ANULL	AA	WIDL
O.I.	DOUBLE AND E	w /	WITH
2L	DOUBLE ANGLE	W/	WITH
LG	LONG	WP	WORKING POINT
LLH	LONG LEG HORIZONTAL	WT	WEIGHT
LLO	LONG LEG OUT	WWF	WELDED WIRE FABRIC

LONG LEG VERTICAL

14. REQUIRED SUBMITTALS

- A. FOLLOWING LIST IS TO BE PROVIDED BY THE CONTRACTOR AND SUBMITTED TO M2 STRUCTURAL.
- 1. CONCRETE MIX DESIGNS. 2. REBAR PLACEMENT AND BEND DWGS. 3. MASONRY REINFORCEMENT PLANS. 4. MASONRY MIX AND GROUT DESIGN DATA

THE SUBMITTALS.

5. WOOD TRUSS PLANS AND DESIGN DATA**.

6. STRUCTURAL STEEL SHOP DRAWINGS**.

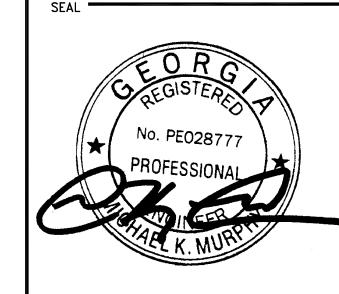
B. ALL SUBMITTALS MARKED ** ABOVE SHOULD BE SIGNED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER. FAILURE IN DOING SO WILL RESULT IN THE REJECTION OF

THE PRESTON PARTNERSHIP, LLC A MULTI-DISCIPLINARY DESIGN FIRM

SOUTH TERRACES 115 PERIMETER CENTER PLACE, SUITE 950 ATLANTA, GEORGIA 30346 TELEPHONE: 770 396 7248 FAX: 770 396 2945 WWW.THEPRESTONPARTNERSHIP.COM



Atlanta, GA 30318 www.m2structural.com 404-829-2612



BALLPARK

2885 CRESCENT PKWY

SMYRNA, GA 30080

ATLANTIC REALTY

PARTNERS 3438 PEACHTREE ROAD, SUITE 1425 ATLANTA, GA 30326 404-591-2900

SCHEMATIC DESIGN SET	08/28/20
DD PROGRESS SET	10/07/20
DD/GMP	10/15/20
FOUNDATION PERMIT	12/07/20
75% CDs	01/29/20
GMP SET	04/03/20
PERMIT SET	05/22/20

149310 DRAWN BY -CHECKED BY -

SHEET NUMBER -

GENERAL NOTES

SHEET TITLE -

RELEASED FOR CONSTRUCTION © 2014 © 2015 The Preston Partnership, LLC