GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING DURING CONSTRUCTION FOUNDATION WALLS WHICH ARE SHOWN TIED INTO SLAB-ON-GRADE OR FLOOR/ROOF FRAMING SHALL BE BRACED AGAINST BACKFILL MOVEMENT UNTIL SLAB/FRAMING (INCLUDING DECK) IS COMPLETED. THOUGH DETAILS DO NOT INDICATE, ADEQUATE DRAINAGE MUST BE PROVIDED BEHIND WALLS TO ELIMINATE UNANTICIPATED HYDROSTATIC LOADING. PROVIDE ADEQUATE SHORING OR BRACING DURING CONSTRUCTION TO RESIST ALL REQUIRED FORCES SUCH AS (BUT NOT LIMITED TO) DEAD LOADS, LIVE LOADS, SOIL PRESSURES, CONSTRUCTION LOADS, WIND AND UNBALANCED LOADING. PROVIDE TEMPORARY SAFETY ENCLOSURES AS NECESSARY TO PROTECT ALL PERSONNEL INVOLVED WITH THIS PROJECT.

2. THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE WITH 2020 GEORGIA AMMENDMENTS SHALL APPLY.

3. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF OPENINGS. ROOF OPENINGS GREATER THAN 12" DIAMETER SHALL BE FRAMED WITH L3x3x1/4" (MINIMUM). SEE NOTE ON ROOF FRAMING PLAN FOR MORE INFORMATION. JOIST/JOIST GIRDER MANUFACTURER SHALL COMPENSATE FOR LOADS IMPOSED BY ROOF-TOP UNITS (R.T.U.'s) BY PROVIDING DOUBLE JOISTS OR SINGLE SPECIAL JOISTS AT THESE LOCATIONS, UNLESS KCS JOISTS ALREADY SHOWN ON PLAN. IF R.T.U. LOADS ARE NOT STATED ON THE ROOF FRAMING PLANS, THEY SHALL BE PROVIDED BY THE ARCHITECT OR THE MECHANICAL ENGINEER. SEE SHEET S5.0 FOR TYPICAL R.T.U. SUPPORT FRAME, REQUIRED AS SUPPORT FOR ROOF-TOP UNITS.

4. DETAILS NOT SHOWN SHALL BE ACCORDING TO:

AMERICAN INSTITUTE OF STEEL CONSTRUCTION	A.I.S.C.	SPECS FOR STRUCTURAL STEEL
AMERICAN CONCRETE INSTITUTE	A.C.I.	SPECS FOR CONCRETE
AMERICAN WELDING SOCIETY	A.W.S.	SPECS FOR WELDING
NATIONAL CONCRETE MASONRY ASSOCIATION	N.C.M.A.	SPECS FOR CONCRETE MASONRY
STEEL JOIST INSTITUTE	S.J.I.	SPECS FOR STEEL JOISTS
AMERICAN IRON & STEEL INSTITUTE	A.I.S.I.	SPECS FOR COLD FORMED STEEL

5. DESIGN LOADS:

ROOF:
- DEAD — 20 P.S.F.
- LIVE (REDUCIBLE) — 20 P.S.F.

SNOW:
- GROUND SNOW LOAD (Pg) — 5 P.S.F.
- SNOW IMPORTANCE FACTOR (Is) — 1.1
- EXPOSURE COEFFICIENT (Ce) — 1.0
- THERMAL COEFFICIENT (Ct) — 1.0
- Pg - GROUND SNOW LOAD — 5 P.S.F.
- Pf - FLAT ROOF SNOW LOAD (USED WITH DRIFT) — 3.85 P.S.F.
- Pm - MINIMUM ROOF SNOW LOAD — 5.5 P.S.F.
- Pf - RAIN ON SNOW LOAD — 8.85 P.S.F.

SEISMIC:
- SEISMIC DESIGN CATEGORY - B
- SEISMIC RISK CATEGORY - III
- SEISMIC IMPORTANCE FACTOR (Ie) - 1.25
- MAPPED SPECTRAL RESPONSE ACCELERATIONS Ss - 0.246
- MAPPED SPECTRAL RESPONSE ACCELERATIONS S1 - 0.092
- SITE COEFFICIENT Fa - 1.3
- SITE COEFFICIENT Fv - 1.5
- SPECTRAL RESPONSE ACCELERATION Sms - 0.319
- SPECTRAL RESPONSE ACCELERATION Sm1 - 0.138
- SPECTRAL RESPONSE COEFFICIENT Sds - 0.213
- SPECTRAL RESPONSE COEFFICIENT Sd1 - 0.092
- SOIL SITE CLASSIFICATION - C (GEOTECHNICAL REPORT)

CLASSROOM AREA:
- BASIC SEISMIC FORCE RESISTING SYSTEM - BUILDING FRAME SYSTEM - INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
  R=4 Ω=2.5 Cd=4
- SEISMIC RESPONSE COEFFICIENT (Cs) - .056

CONNECTOR AREA:
- BASIC SEISMIC FORCE RESISTING SYSTEM - STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCLUDING CANTILEVER COLUMN SYSTEMS.
  R=3 Ω=3 Cd=3
- SEISMIC RESPONSE COEFFICIENT (Cs) - .075

ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE PROCEDURE

WIND:
- ULTIMATE WIND SPEED (3 SEC GUST) Vult — 113 M.P.H.
- RISK CATAGORY — III
- EXPOSURE — C
- INTERNAL PRESSURE COEFFICIENT — +/- 0.18

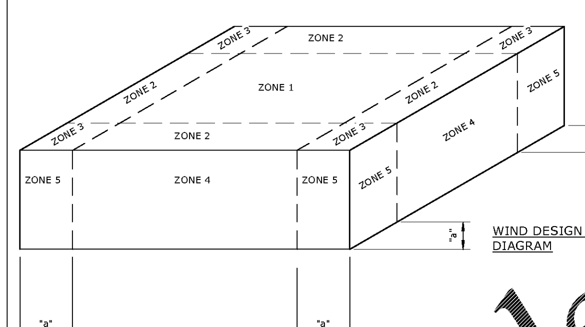
COMPONENT & CLADDING SUCTION/PRESSURES (ALL PRESSURES **ULTIMATE** PER ASCE 7-16)

ROOF PRESSURE (TA >= 100 SQ-FT)
- ZONES 1-3 — 9.0 PSF

ROOF SUCTION (TA >= 100 SQ-FT)
- ZONE 1 — -25.5 PSF
- ZONE 1' — -25.5 PSF
- ZONE 2 — -34.7 PSF
- ZONE 3 — -46.0 PSF

WALL PRESSURE (PSF) ('+' - FORCE ACTS TOWARDS SURFACE / '-' - FORCE ACTS AWAY FROM SURFACE)

	10 SQ-FT	20 SQ-FT	50 SQ-FT	100 SQ-FT	500 SQ-FT
ZONE 4	+25.5/-27.6	+24.4/-26.5	+22.9/-25.0	+21.8/-23.9	+19.2/-21.3
ZONE 5	+25.5/-34.0	+24.4/-31.8	+22.9/-26.5	+21.8/-26.5	+19.2/-21.3



WIND DESIGN DIAGRAM

6. CONTRACTOR SHALL REVIEW SHOP DRAWINGS AND VERIFY ALL DIMENSIONS PRIOR TO SUBMITTING SAME TO ARCHITECT AND/OR ENGINEER FOR REVIEW. ARCHITECT AND ENGINEER'S REVIEW OF SHOP DRAWINGS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

7. ALL SHOP DRAWINGS SHALL BE PREPARED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF GEORGIA.

8. EXPANSION BOLTS AND/OR SLEEVE ANCHORS ARE NEVER TO BE PERMITTED AS A SUBSTITUTE FOR CAST-IN-PLACE ANCHOR BOLTS WHERE CAST-IN-PLACE BOLTS HAVE BEEN SHOWN ON THE DRAWINGS.

9. THE DESIGN OF SPECIAL CONNECTIONS BETWEEN STEEL FRAMING COMPONENTS BY OTHER THAN THE PROJECTS STRUCTURAL ENGINEER-OF-RECORD SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF GEORGIA INCLUDING BUT NOT LIMITED TO BRACE END CONNECTIONS, MOMENT-RESISTING CONNECTIONS, MODIFIED BEAM SEAT CONNECTIONS, AND MEMBER SPLICE CONNECTIONS. FORCES FOR SUCH CONNECTIONS ARE SHOWN IN THE STRUCTURAL DRAWINGS.

10. SPECIAL INSPECTION REPORTS AND A FINAL BUILDING REPORT IN ACCORDANCE WITH SECTION 1704.1.2 OF THE GEORGIA STATE MINIMUM STANDARD BUILDING CODE SHALL BE AVAILABLE AT THE TIME THE BUILDING IS APPROVED FOR OCCUPANCY.

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CONCRETE NOTES:

1. ALL CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:

FOOTINGS	3000 P.S.I.
SLAB ON GRADE	3000 P.S.I.
RETAINING WALLS	4000 P.S.I.
EXTERIOR SLABS	4000 P.S.I.
U.N.O.	3000 P.S.I.

2. AIR ENTRAINING AGENTS SHALL BE USED TO PRODUCE 3% TO 6% AIR BY VOLUME IN ALL CONCRETE EXCEPT INTERIOR SLABS ON GRADE. (3% MAX.)

3. C.J. ON PLANS INDICATES CONSTRUCTION JOINTS OR CONTROL JOINTS. IF NOT SHOWN OTHERWISE; MAINTAIN A MAXIMUM AREA BOUNDED BY THE SLAB CONTOL JOINTS AS FOLLOWS:

4" SLAB	100 SQUARE FEET (i.e. 10' x 10')
5" SLAB	144 SQUARE FEET (i.e. 12' x 12')
6" SLAB	225 SQUARE FEET (i.e. 15' x 15')

THE MAXIMUM SIDE RATIO OF WHICH SHALL BE 1.5:1 AND JOINTS AT REENTRANT SLAB CORNERS.

4. ALL STEEL BAR REINFORCEMENT SHALL BE A.S.T.M. A-615, GRADE 60. ALL BARS USED IN WELDED CAPACITIES SHALL BE A.S.T.M. A-706.

5. MAINTAIN MINIMUM CONCRETE COVERAGE FOR REINFORCING STEEL AS INDICATED UNLESS OTHERWISE NOTED IN THE DRAWINGS.
   - A. 3" CLEAR WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH.
   - B. 2" CLEAR WHERE CONCRETE IS EXPOSED TO EARTH OR WEATHER BUT CAST AGAINST FORMS FOR BARS #6 OR LARGER.
   - C. 1 1/2" CLEAR WHERE CONCRETE IS EXPOSED TO EARTH OR WEATHER BUT CAST AGAINST FORMS FOR BARS #5 OR SMALLER.
   - D. 3/4" CLEAR FOR SLABS AND WALLS FORMED ABOVE GRADE AND NOT EXPOSED TO WEATHER.
   - E. 1 1/2" CLEAR FOR BEAMS AND COLUMNS FORMED ABOVE GRADE AND NOT EXPOSED TO WEATHER.

6. UNLESS NOTED OTHERWISE IN THE DRAWINGS, CAST IN PLACE CONCRETE SHALL HAVE THE FOLLOWING TRIM STEEL ADDED AROUND ALL OPENINGS: TWO (2) - #5 BARS (LENGTH OF BARS = LENGTH OF OPENING + 4'-0") ALONG EACH SIDE OF OPENING AND TWO (2) - #5 x 5'-0" DIAGONALLY AT EACH CORNER.

7. FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2,000 P.S.F. PER GEOTECHNICAL REPORT BY MATRIX ENGINEERING GROUP, INC. PROJECT NO. MEG 302340 DATED FEBRUARY 6, 2020. ALL FOOTING EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE. CONTRACTOR SHALL EXERCISE CAUTION TO INSURE THAT ALL RECOMMENDATIONS OF THE CIVIL AND SOILS ENGINEERS ARE FOLLOWED CLOSELY. FOR DETAILS OF FILL AND COMPACTION REQUIREMENTS, REFER TO GEOTECH REPORT, CIVIL DRAWINGS AND THE SPECIFICATIONS.

8. SEE ARCHITECTURAL DRAWINGS/SPECIFICATIONS FOR CONCRETE FLOOR FINISH REQUIREMENTS.

9. DESIGN OF CONCRETE STRUCTURAL ELEMENTS SHALL BE IN ACCORDANCE WITH ACI-318-11.

10. CONCRETE TEST REPORTS SHALL BE AVAILABLE AT THE JOBSITE.

11. CHAMFER ALL CORNERS 3/4" U.N.O.

12. CONCRETE SUPPLIER TO PROVIDE MIX DATA IN COMPLIANCE WITH ACI 318-11 CHAPTER 5.

13. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW WELL IN ADVANCE OF CONCRETE PLACEMENT. CONCRETE MIX DESIGN SHALL INCLUDE ALL STRENGTH DATA NECESSARY TO SHOW COMPLIANCE WITH THE PROJECT SPECS BY EITHER THE TRIAL BATCH OR FIELD EXPERIENCE METHOD AND SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.

14. WHERE FOOTINGS, WALLS, OR OTHER STRUCTURAL ELEMENTS INTERSECT, CORNER OR TEE, PROVIDE CORNER BARS WITH REQUIRED LAP LENGTHS TO PROVIDE CONTINUITY OF HORIZONTAL STEEL REINFORCING U.N.O.

15. SLAB-ON-GRADE SHALL BE SAWCUT IMMEDIATELY AFTER CONCRETE HARDENS.

16. MINIMUM LAP AND SPLICE LENGTH FOR A REINFORCEMENT BAR SHALL BE CLASS B PER THE SCHEDULE BELOW AND BASED UPON THE LARGEST BAR UNO. WELDING OF REINFORCEMENT NOT ALLOWED UNLESS APPROVED OTHERWISE.

17. PROVIDE A 15-MIL POLYETHYLENE VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES SHALL BE PLACED BETWEEN THE BASE COURSE OR SUBGRADE AND THE INTERIOR CONCRETE FLOOR SLAB. SEE PLAN FOR SPECIFIED VAPOR RETARDER.

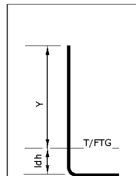
18. STEEL REINFORCEMENT TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 AND WELDING SHALL BE IN ACCORDANCE WITH AWS D1.4, STRUCTURAL WELDING CODE - REINFORCING STEEL BY AMERICAN WELDING SOCIETY.

19. COLD WEATHER PLACEMENT: COMPLY WITH PROVISIONS OF ACI 306 AND AS FOLLOWS: PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES. WHEN AIR TEMPERATURE HAS FALLED TO OR IS EXPECTED TO FALL BELOW 40 DEGREES FARENHEIT, UNIFORMILY HEAT WATER AND AGGREGATES BEFORE MIXING TO OBTAIN A CONCRETE MIXTURE TEMPERATURE OF NOT LESS THAN 50 DEGREES FARENHEIT AND NOT MORE THAN 80 DEGREES FARENHEIT AT POINT OF PLACEMENT.
    1. DO NOT USE FROZEN MATERIALS OR MATERIALS CONTAINING ICE OR SNOW. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE OR ON SUBGRADE CONTAINING FROZEDN MATERIALS.
    2. DO NOT USE CALCIUM CHLORIDE, SALT, OR OTHER MATERIALS CONTAINING ANTIFREEZE AGENTS OR CHEMICAL ACCELERATORS UNLESS OTHERWISE ACCEPTED IN MIX DESIGNS.

8. WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR COLD-DRAWN STEEL WIRE FOR CONCRETE REINFORCEMENT A.S.T.M. A-185. ALL WELDED WIRE FABRIC SHALL BE CLEAN AND FREE OF EXCESSIVE RUST.

LAP SPLICE SCHEDULE

BAR SIZE	LAP SPLICE DIMENSION (IN)				COMPRESSION SPLICE
	f'c = 3000 psi		f'c = 4000 psi		
	OTHER	TOP BARS	OTHER	TOP BARS	
#3	22"	29"	19"	25"	12"
#4	29"	38"	25"	32"	15"
#5	36"	46"	31"	40"	19"
#6	43"	56"	38"	49"	23"
#7	63"	81"	55"	71"	27"
#8	72"	94"	63"	81"	30"
#9	81"	105"	70"	91"	34"



HOOKED BAR SCHEDULE

BAR SIZE	X	ldh	Y
#3	0'-6"	0'-6"	LAP SPLICE
#4	0'-8"	0'-8"	LAP SPLICE
#5	0'-10"	0'-10"	LAP SPLICE
#6	1'-0"	1'-0"	LAP SPLICE
#7	1'-2"	1'-2"	LAP SPLICE
#8	1'-4"	1'-4"	LAP SPLICE

STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL BE PROVIDED AS FOLLOWS:

RECTANGULAR/SQUARE HSS SHAPES (ASTM A500 Gr. B)	46 K.S.I. YIELD
ROUND HSS SHAPES (ASTM A500 Gr. B)	42 K.S.I. YIELD
STEEL PIPES (ASTM A53 Gr. B)	35 K.S.I. YIELD
W SHAPES (ASTM A992)	50 K.S.I. YIELD
STRUCTURAL STEEL U.N.O. (ASTM A36)	36 K.S.I. YIELD

U.N.O. COLUMN BASE PLATES SHALL BE 6" LARGER IN EACH DIRECTION THAN THE NOMINAL DIMENSION OF THE SUPPORTED COLUMN (i.e. 12" SQUARE BASE PLATE FOR 6" DIAMETER OR 6" SQUARE COLUMN AND 10" SQUARE BASE PLATE FOR 4" DIAMETER OR 4" SQUARE COLUMN). ALL BASE PLATES SHALL BE ANCHORED TO FOOTING BELOW WITH (4)- 3/4" DIA. x 1'-1" HEADED ANCHOR RODS (9" EMBEDMENT + 4" PROJECTION) UNLESS SPECIFICALLY NOTED OTHERWISE. BASE PLATES SHALL BE 3/4" THICK UNLESS NOTED OTHERWISE.

2. ALL STRUCTURAL STEEL FASTENERS SHALL BE PROVIDED AS FOLLOWS:
   - BOLTED CONNECTIONS IN STEEL FRAMEWORK U.N.O. (ASTM A325-N)
   - CARBON AND ALLOY NUTS (ASTM A563)
   - HARDENED STEEL WASHERS (ASTM F-436)
   - COMPRESSIBLE-WASHER-TYPE DIRECT TENSION INDICATORS (ASTM F-959)
   - THREADED RODS (ASTM A36)
   - ANCHOR RODS U.N.O. (ASTM F1554 Gr. A36)

3. STRUCTURAL STEEL MEMBERS TO RECEIVE SPRAYED-ON FIREPROOFING SHALL NOT BE PRIMED OR PAINTED.

4. UNLESS NOTED OTHERWISE IN THE DRAWINGS, ALL FILLET WELDS SHALL BE 3/16". ALL WELDS SHALL BE MADE WITH E-70 ELECTRODES. MIN. LENGTH OF INTERMITTENT WELDS SHALL BE 1 1/2".

5. UNLESS OTHERWISE SHOWN, ALL BEAM CONNECTIONS SHALL BE STANDARD FRAMED OR SEATED CONNECTIONS AS SHOWN IN PART 9&10 OF THE AISC MANUAL OF STEEL CONSTRUCTION. UNLESS GREATER REACTIONS ARE INDICATED ON THE PLANS, CONNECTIONS SHALL DEVELOP AT LEAST ONE-HALF OF THE TOTAL UNIFORM LOAD CAPACITY TABULATED IN THE TABLES OF THE MANUAL FOR THE GIVEN SHAPE AND SPAN OF BEAM IN QUESTION, AND 70% OF THE TOTAL UNIFORM LOAD CAPACITY FOR COMPOSITE BEAMS. IN NO CASE, HOWEVER, SHALL THE LENGTH OF THE FRAMED CONNECTION BE LESS THAN ONE-HALF OF THE "T" DISTANCE OF THE BEAM WEB.

6. CONTRACTOR SHALL PROVIDE CONTINUOUS L4x4x5/16 AS TYPICAL ROOF DECK CLOSURE, OR AS MEANS FOR ATTACHMENT FOR ADJACENT STEEL STUDS - U.N.O. ON PLANS, DETAILS OR SECTIONS. SIMILARLY A CONTINUOUS L (SLAB DEPTH x SLAB DEPTH x 5/16" min.) SHALL BE PROVIDED AT FLOOR DECK CLOSURES U.N.O.

7. GRIND EXPOSED WELDS SMOOTH AND FLUSH, TO MATCH AND BLEND WITH ADJOINING SURFACES.

8. COAT ALL COLUMN BASES EXPOSED TO EARTH W/ BITUMASTIC COATING.

9. ALL BOLTED CONNECTIONS SHALL BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH WITH RCSC-2009 (SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS.

10. BOLTED CONNECTIONS SHALL BE ASSEMBLED AND INSPECTED ACCORDING TO "SPECIFICATIONS FOR STRUCTURAL JOINTING USING ASTM A325 OR ASTM A490 BOLTS." WELDED CONNECTIONS SHALL CONFORM TO THE PROVISIONS OF ASW D1.1, STRUCTURAL WELDING CODE BY AMERICAN WELDING SOCIETY (SECTION 2207).

11. WHERE PRACTICAL, UNLESS SHOWN DIFFERENTLY ON DRAWINGS, ALL BRACING CONNECTIONS SHALL BE DESIGNED AND DETAILED SO THAT ALL FORCE COMPONENTS CAN BE DELIVERED DIRECTLY TO THE CENTERLINE OF INTERSECTING MEMBERS. WHERE THIS IS NOT PRACTICAL, CONNECTIONS SHALL BE DESIGNED TO ACCOUNT FOR RESULTING ECCENTRICITIES.

12. GROUT SHALL BE NON-SHRINK WITH A MINIMUM 7 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I. EXPOSED GROUT SHALL BE NON-STAINING.

13. COORDINATE PRIMER FOR ALL EXPOSED STEEL WITH REQUIREMENTS OF SECTION 09960. PROVIDE ONE SHOP COAT OF A RUST INHIBITIVE PRIMER (GREY) TO ALL STRUCTURAL MEMBERS. DO NOT PAINT SURFACES TO BE WELDED, EMBEDDED IN CONCRETE OR MASONRY, OR CONTACT SURFACES OF FRICTION CONNECTIONS.

14. STRUCTURAL STEEL ENCASED IN CONCRETE SHALL BE GALVANIZED.

15. FOR COLD-FORMED METAL FRAMING (STRUCTURAL): MEMBERS SHALL POSSESS MIN. SECTION AND MATERIAL PROPERTIES PER AISI COLD-FORMED STEEL SPECIFICATIONS AND THE STEEL STUD MANUFACTURERS ASSOCIATION. MATERIALS AND ERECTION SHALL BE PER MANUFACTURER'S SPECIFICATIONS.

MASONRY NOTES:

1. MASONRY WALL CONTROL JOINTS SHALL BE LOCATED IN THE MASONRY UNIT HEAD JOINT CLOSEST TO LOCATION SHOWN ON ARCHITECTURAL ELEVATIONS. MAXIMUM SPACING IF NOT SHOWN ON PLANS SHALL BE 25'-0" O.C.

2. PROVIDE MIN. 0'-8" BEARING AT EACH SIDE OF MASONRY OPENINGS IN C.M.U., U.N.O. PROVIDE "C" FILLED CELLS EACH SIDE OF OPENING PER DETAILS SHEET S3.2. PROVIDE DOWEL INTO FOOTING BELOW.

3. REINFORCED MASONRY GROUT (R.M.G.) FOR FILLING CELLS IN C.M.U. WALLS SHALL CONFORM TO: "STANDARD SPECS. FOR MORTAR ADN GROUT REINFORCED MASONRY", A.S.T.M. C-476, WITH A SLUMP OF BETWEEN 9" AND 11", AND PLACED NOT MORE THAN 2-1/2 HOURS AFTER WATER HAS FIRST BEEN ADDED (ONE PART CEMENT TO 2-1/2 PARTS FINE AGGREGATE BY VOLUME, DEVELOPING 2000 P.S.I. AT 28 DAYS). PLACE IN 4'-8" LIFTS, MAXIMUM.

4. TYPE "S" MORTAR SHALL BE USED FOR ALL C.M.U. WALLS MIN.

5. FILLED CELLS IN CONCRETE MASONRY UNITS (C.M.U.) SHALL BE LOCATED AS NOTED ON THE FOUNDATION PLAN OR SHOWN IN SECTIONS/TYPICAL DETAILS. ALL C.M.U. WALLS WHICH CONTAIN FILLED CELLS SHALL BE LAID-UP IN A RUNNING BOND PATTERN AND HAVE THE FOLLOWING MINIMUM REINFORCEMENT: (1)-#5 BAR AND RMG IN (3) CELLS AT ALL CORNERS, WITHIN 16" OF EACH END OF AN OPENING, WITHIN 8" OF EACH SIDE OF A MOVEMENT JOINT, AND WITHIN 8" OF THE END OF A WALL.

6. FILLED CELLS SHALL BE CONTINUOUS FROM FOOTING TO TOP BOND BEAM COURSE OR UNDERSIDE OF BEAMS IN ANY GIVEN WALL SEGMENT.

7. ALL VERTICAL REINFORCEMENT IN FILLED CELLS SHALL BE DOWELLED INTO FOOTING AT BOTTOM AND BOND BEAM COURSE AT TOP. THESE DOWELS SHALL BE OF EQUAL SIZE AND QUANTITY AS VERTICAL BAR REINFORCEMENT AND SHALL HAVE A 1'-0" BEND INTO EITHER FOOTING OR BOND BEAM EXCEPT WHERE FILLED CELL REINFORCEMENT IS WELDED TO UNDERSIDE OF BEAMS AT TOP. SEE WALL SECTIONS FOR MORE INFORMATION.

8. CONTRACTOR SHALL PROVIDE STANDARD GAUGE "DUR-O-WALL" OR EQUIVALENT (JOINT REINFORCEMENT) AT 16" O.C. IN ALL C.M.U. WALLS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. "DUR-O-WALL" (OR EQUIVALENT) SHALL BE PROVIDED IN A WIDTH APPROPRIATE FOR THE OVERALL TOTAL THICKNESS OF THE FINISHED WALL. IN MANY CASES, BRICK VENEER WILL BE REQUIRED, BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATIONS OF VARIOUS WALL THICKNESS WITH ALL OF THE CONTRACT DOCUMENTS. IN THE CASE OF NON-COMPOSITE WALLS (1- C.M.U. WYTHE ONLY) PROVIDE "TRUSS-TYPE" HORIZONTAL REINFORCING. IN THE CASE OF COMPOSITE WALLS (C.M.U. + BRICK VENEER) PROVIDE ADJUSTABLE ASSEMBLIES.

9. BARS SHALL BE A.S.T.M. A-615, GRADE 60: EXCEPT TIES AND STIRRUPS, WHICH MAY BE GRADE 40. ALL OTHER BARS USED IN WELDED CAPACITITES SHALL BE A.S.T.M. A-706.

10. BOND BEAMS SHALL BE PROVIDED AT THE TOP OF WALL OPENINGS AND SHALL EXTEND NOT LESS THAN 24" NOR LESS THAN 40 BAR DIAMETERS PAST THE OPENING. AT LOCATIONS WHERE FULL EXTENSION OF THE REINFORCING CANNOT BE ACHIEVED, PROVIDE 180 DEG. HOOKS AROUND VERTICAL REBAR IN THE LAST FILLED CELL WHERE THE WALL TERMINATES. (BOTH SIDES OF OPENING IF NECESSARY).

11. A MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY (f'm) OF 1500 P.S.I. IS REQUIRED FOR ALL REINFORCED MASONRY CONSTRUCTION. STENGTH SHALL BE VERIFIED BY THE UNIT STRENGTH METHOD ACI 530.1/ASCE/TMS 602. TEST RESULTS SHALL BE SUBMITTED TO THE BUILDING INSPECTOR.

12. ALL ANCHORS BUILT INTO MASONRY SHALL BE GALVANIZED.

13. MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1, CURRENT EDITION. PROVIDE MASONRY INSPECTIONS PER ACI 530. CAVITIES SHALL BE KEPT FREE OF MORTAR.

14. MASONRY WALLS ARE NOT SELF SUPPORTING AND SHOULD BE SHORED FOR LATERAL LOADING UNTIL ATTACHED TO THE STRUCTURE.

15. REINFORCING BARS FOR VERTICAL FILLED CELLS SHALL BE LAPPED AS FOLLOWS:

LAP LENGTH/DEVELOPMENT LENGTH 8" CMU -- f'm = 1500 psi

LONGITUDINAL BAR SIZE	REINFORCEMENT LOCATION		
	CENTERED IN CELL	OFFSET IN CELL	
		MIN. 1 1/2" CLEAR COVER*	MIN. 2" CLEAR COVER*
#4	15"	34"	26"
#5	23"	45"	40"
#6	43"	54"	54"
#7	60"	63"	63"
#8	72"	72"	72"

*COVER BETWEEN REBAR AND CMU OR ADJACENT LONGITUDINAL REIN.

JOIST NOTES:

1. DIAGONAL BRIDGING FOR JOISTS AND LONG SPAN JOISTS SHALL NOT BE ALLOWED IN BAYS UTILIZED BY MECHANICAL DUCTWORK RUNS. SEE MECHANICAL PLANS FOR LOCATIONS. GENERAL CONTRACTOR/JOIST SUPPLIER TO COORDINATE.

2. JOIST SPACINGS MAY BE ADJUSTED BY 6" MAX. TO ACCOMMODATE FAN UNIT CLEARANCE REQUIREMENTS. GENERAL CONTRACTOR TO COORDINATE.

3. MECHANICAL EQUIPMENT LOCATIONS SHOWN ON THE ROOF FRAMING PLANS ARE BASED ON INFORMATION THAT WAS SUPPLIED BY THE MECHANICAL ENGINEER. SEE THE MECHANICAL DRAWINGS OF THE CONSTRUCTION DOCUMENTS FOR EXACT EQUIPMENT LOCATIONS.

4. JOIST DETAILER SHALL LOCATE JOIST BRIDGING IN SUCH A WAY AS TO PREVENT INTERFERENCE WITH MECHANICAL/ELECTRICAL EQUIPMENT. THIS MAY CAUSE THE JOIST BRIDGING TO BE "TIGHTENED" OR "SPREAD-OUT" TO A NON-TYPICAL SPACING FOR A GIVEN BAY.

METAL DECK NOTES:

1. ROOF DECK SHALL BE 1 1/2" DEEP WIDE RIB STEEL ROOF DECK, TYPE B, U.N.O.

2. ROOF DECK SHALL BE ATTACHED TO SUPPORTING MEMBERS AND CLOSURE ANGLES AND/OR PLATES IN ACCORDANCE WITH VULCRAFT ATTACHMENT CRITERIA. SEE ROOF PLANS FOR DECK GAUGES & ATTACHMENT PATTERNS.

3. THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THE METAL DECK FASTENERS FOR THIS PROJECT. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED BELOW MAY BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD (EOR) FOR REVIEW. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS THAT MEET THE CODE REQUIREMENTS FOR DECK ATTACHMENT, POSSESS A FM GLOBAL APPROVAL AND POSSESS A CODE REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT PERFORMANCE VALUES OF THE DESIGN BASIS PRODUCT. CONTRACTOR SHALL CONTACT MANUFACTURER'S REPRESENTATIVE FOR PRODUCT INSTALLATION TRAINING AND A LETTER SHALL BE SUBMITTED TO THE EOR INDICATING TRAINING HAS TAKEN PLACE. REFER TO THE BUILDING CODE AND MANUFACTURER'S LITERATURE FOR ANY OTHER REQUIREMENTS. FASTENERS SHALL BE COLLATED AND INSTALLED USING THE MANUFACTURER'S DELIVERY TOOL AND FOLLOWING MANUFACTURER'S INSTRUCTIONS. REFER TO PLAN NOTES, DETAILS OR SCHEDULES FOR THE SPECIFIC FASTENER PATTERN FOR VARIOUS ZONES OF THE DECK.
   - A. SUPPORT FASTENERS: 5/8" DIAMETER PUDDLE WELDS.
   - B. SIDELAP FASTENERS: SELF-DRILLING #10-16 TEK SCREW
   - C. PERIMETER FASTENERS: 5/8" DIAMETER PUDDLE WELDS @ 6" O.C.

4. HANGING STRUCTURE FROM THE ROOF DECK IS NOT PERMITTED.

POST INSTALLED ANCHOR NOTES:

POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE AS SHOWN IN THE DETAILS. INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) CONTRACTOR SHALL CONTACT MANUFACTURER'S REPRESENTATIVE FOR PRODUCT INSTALLATION TRAINING AND A LETTER SHALL BE SUBMITTED TO THE EOR INDICATING TRAINING HAS TAKEN PLACE. REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED BELOW MAY BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD (EOR) FOR REVIEW. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT PERFORMANCE VALUES OF THE DESIGN BASIS PRODUCT.

A. FOR ANCHORING TO CONCRETE
- 1.) MECHANICAL ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193. PRE-APPROVED MECHANICAL ANCHORS INCLUDE:
  - (a.) SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
  - (b.) SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713)
- 2.) ADHESIVE ANCHORS FOR USE IN CRACKED AND UNCRACKED CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC308. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
  - (a.) SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
- 3.) POWER ACTUATED FASTENERS FOR USE IN CONCRETE SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
  - (b.) SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)

B. FOR ANCHORING TO MASONRY
- 1.) ANCHORAGE TO SOLID-GROUTED CONCRETE MASONRY
  - (a.) MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC01 OR AC106. PRE-APPROVED MECHANICAL PRODUCTS INCLUDE:
    - (i.) SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
  - (b.) ADHESIVE ANCHORS FOR USE IN SOLID-GROUTED MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
    - (i.) SIMPSON STRONG-TIE "SET-XP" (IAMPO-UES ER-265)
  - (c.) POWER ACTUATED FASTENERS FOR USE IN MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
    - (i.) SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
    - (ii.) SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
- 2.) ANCHORAGE TO HOLLOW CONCRETE MASONRY/UNREINFORCED CLAY BRICK MASONRY
  - (a.) SCREW ANCHORS FOR USE IN HOLLOW CONCRETE MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED SCREW ANCHORS INCLUDE:
    - (i.) SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
  - (b.) ADHESIVE ANCHORS WITH SCREEN TUBES SHALL BE TESTED AND QUALIFIED IN ACCORDANCE WITH ICC-ES AC58 OR AC60, AS APPROPRIATE. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED ADHESIVE ANCHORS WITH SCREEN TUBES INCLUDE:
    - (i.) SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)
  - (c.) GAS AND POWDER-ACTUATED FASTENERS FOR USE IN HOLLOW CONCRETE MASONRY SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
    - (i.) SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
    - (ii.) SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)

C. STEEL FASTENERS
- 1.) GAS AND POWDER-ACTUATED FASTENERS FOR USE IN STEEL SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED ADHESIVE ANCHORS INCLUDE:
  - (a.) SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
  - (b.) SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)

DEFERRED SUBMITTAL ITEMS:

PRIOR TO INSTALLATION AND INSPECTION OF DEFERRED ITEMS, CALCULATIONS AND LAYOUT PLANS SHALL BE AT THE JOB SITE WITH ALL SHEETS BEARING A GEORGIA CIVIL/STRUCTURAL ENGINEER WET SEAL AND SIGNATURE RESPONSIBLE FOR THE DESIGN; TOGETHER WITH THE ACCEPTED REVIEWED STAMP BY THE BUILDING ARCHITECT/ENGINEER AND THE BUILDING DEPARTMENT'S APPROVAL STAMP. (THREE COPIES OF REVIEWED DOCUMENTS TO BE SUBMITTED TO THE BUILDING DEPARTMENT.

1. CANOPIES/AWNINGS
2. GLAZED SYSTEMS (INCLUDED BUT NOT LIMITED TO WINDOW UNITS, CURTAIN WALL, AND STOREFRONTS) WHICH EXCEED 10FT. IN HEIGHT.
3. LIGHT GUAGE STEEL FRAMING

Breaux & Associates
ARCHITECTS
5955 Shiloh Road East, Suite 200
Alpharetta, Georgia 30005 | (678) 585-4508

GEORGIA REGISTERED No. 18638 PROFESSIONAL ENGINEER RANDALL W. GIPSON

HAINES GIPSON & ASSOCIATES

NO	DESCRIPTION	DATE

RUSSOM ELEMENTARY SCHOOL ADDITION

44 RUSSOM ELEMENTARY SCHOOL LANE
DALLAS, GA 30132
(FACILITY CODE: 710-0204)

PAULDING COUNTY SCHOOLS

GENERAL NOTES

DATE	03/06/2020
PROJECT NO.	19117

S1.0

104372 SF S.F. (EXISTING AREA) + 22878 SF S.F. (NEW AREA) = 127250 SF S.F. (TOTAL AREA); 800 F.T.E. (EXISTING) + 250 F.T.E. (NEW) = 1050 F.T.E. (TOTAL); 55 I.U. (EXISTING) + 17 I.U. (NEW) = 72 I.U. (TOTAL)

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