

GENERAL NOTES:

(THESE SPECIFICATIONS ARE IN ADDITION TO AND DO NOT EXCLUDE ANY FOUND IN THE GENERAL SPECIFICATIONS FOR THE PROJECT)

1. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION, INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA AND OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.

2. SHOP DRAWINGS FOR STRUCTURAL STEEL, JOIST, DECKING, AND COLD FORMED METAL TRUSSES SUBMITTALS SHALL COMPLY WITH THE FOLLOWING:

A. CONTRACTOR SHALL FURNISH COMPLETE AND DETAILED SHOP DRAWINGS PREPARED UNDER SUPERVISION OF A REGISTERED STRUCTURAL ENGINEER. THESE DRAWINGS SHALL SHOW SIZES, LOCATION, TYPE AND EXTENT OF ALL MEMBERS, BOLTS AND WELDS.

B. INDICATE THE DATE OF THE STRUCTURAL DRAWINGS USED FOR SHOP DRAWING PREPARATION.

C. INDICATE WELDS BY STANDARD AWS SYMBOLS AND SHOW SIZE LENGTH AND TYPE OF EACH WELD.

D. PROVIDE SETTING DRAWINGS, TEMPLATES AND DIRECTIONS FOR INSTALLATION OF ANCHOR BOLTS AND OTHER ANCHORAGES TO BE INSTALLED BY OTHERS.

E. CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTAL FOR ENGINEERING REVIEW.

F. CONTRACTOR SHALL HAVE AN APPROVED SET OF STRUCTURAL STEEL SHOP DRAWINGS AND PROOF OF WELDER CERTIFICATION AT THE JOBSITE AT ALL TIMES.

G. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

H. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR BUILDING LOCATION AND ORIENTATION. COORDINATE ALL DIMENSIONS WITH ARCH. DRAWINGS. DO NOT SCALE DRAWING.

I. SECTIONS CUTS INDICATED ON THE DRAWINGS APPLY TO ALL LIKE AND SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE PLANS. COORDINATE SIMILAR CONDITIONS WITH ARCHITECTURAL, MECHANICAL, AND CIVIL DRAWINGS.

3. DESIGN LOADS: THE BUILDING STRUCTURE DESCRIBED IN THESE PLANS SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE 2012 GEORGIA STATE BUILDING CODE w/ ALL AMENDMENTS. USE ASCE 7-10 CHAPTER 2 FOR ALL LOAD COMBINATIONS AND LOADS NOT INDICATED HEREIN.

A. GRAVITY LOADS
DEAD LOADS:
ROOF: PER METAL BUILDING MANUFACTURER

LIVE LOADS:
ROOF: 20 PSF (REDUCED PER CODE)
FLOOR: 100 PSF (ASSEMBLY AREA)
150 PSF (STAGE FLOOR)

B. SNOW LOADS:
GROUND SNOW LOAD (Pg): 5 PSF
BALANCED ROOF SNOW LOAD (PFRAIN): 10 PSF
SNOW EXPOSURE FACTOR (Ce): 0.9
SNOW IMPORTANCE FACTOR (Is): 1.0
THERMAL FACTOR (Ct): 1.0

C. WIND LOADS:
BASIC WIND SPEED(3 SEC. GUST): 115 MPH
WIND IMPORTANCE FACTOR (Iw): 1.0
RISK CATEGORY: II
EXPOSURE CATEGORY: B
INTERNAL PRESSURE (Gcpi): +/-0.18

REFER TO ASCE-7-10 FOR COMPONENT & CLADDING LOADS

D. SEISMIC DESIGN CRITERIA:
SEISMIC IMPORTANCE FACTOR (Ie): 1.00
RISK CATEGORY: II
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss: 0.347

S1: 0.116
SITE CLASS: D
SD(S): 0.352g
SD(1): 0.181g
SITE COEFFICIENT
Fg = 1.52
Fv = 2.34
SEISMIC DESIGN CATEGORY: C
BASIC SEISMIC FORCE RESISTING SYSTEM:
SEISMIC RESPONSE COEFFICIENT (Cs): BY PRE-ENGINEERED METAL BUILDING MANUFACTURER
RESPONSE MODIFICATION FACTORS (R): BY PRE-ENGINEERED METAL BUILDING MANUFACTURER
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

4. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE AND SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.

FOUNDATION NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIREMENTS. EXTERIOR CONCRETE SHALL BE AIR ENTRAINED TO 0% +/- 1 1/2%

2. SEE ARCHITECTURAL DRAWINGS FOR SIDE WALK EXTENTS, PLANTER, AND PAVER LOCATIONS. CONCRETE PADS STAIRS. SEE ARCH. FOR DIMENSIONS AT INTERIOR MASONRY PARTITIONS, AND DETAILS.

3. COORDINATE FINISHED FLOOR ELEVATIONS (F.F.E.) WITH ARCH. AND CIVIL DRAWINGS.

4. REFERENCE FFE = 0.0'

5. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF.

6. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY A GEORGIA REGISTERED GEOTECHNICAL ENGINEER OR TESTING AGENCY PRIOR TO PLACING ANY FOUNDATION CONCRETE. CONTACT STRUCTURAL ENGINEER IF THE ALLOWABLE SOIL BEARING PRESSURE IS LESS THAN 2000 PSF.

7. ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 1'-8" BELOW F.F.E. AND A MINIMUM OF 0'-8" BELOW ADJACENT EXTERIOR FINISH GRADE, UNLESS NOTED OTHERWISE

8. PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING OR NEW UTILITIES. LOWER FOUNDATION AS REQUIRED TO AVOID INTERFERENCE WITH UTILITIES, EXCEPT WHERE ZERO LOT LINE FOOTINGS ARE LOCATED PARALLEL TO ADJACENT BUILDINGS. REFER TO THE FOUNDATION FOUNDATION PLAN FOR FOOTING STEP ADJACENT BUILDINGS - CONTACT ARCH/STRUCTURAL ENGINEER IF A CONFLICT OCCURS.

9. CONSULT WITH A GEORGIA REGISTERED GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS OF EXCAVATION WORK, OVEREXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN GEOTECHNICAL ENGINEER'S AND STRUCTURAL PLAN, THEN THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RE.

11. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2" INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTING AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS THROUGH THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.

12. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVED TESTING SUBGRADES PRIOR TO PLACING CONCRETE.

CONCRETE SLAB NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIREMENTS. COORDINATE VAPOR BARRIER REQUIREMENTS W/ ARCHITECTURAL AND GEOTECHNICAL ENGINEER REQUIREMENTS. PROVIDE 10 MIL MIN. POLYETHYLENE VAPOR BARRIER WITH JOINTS LAPPED 6" AND TAPED UNDER ALL INTERIOR SLABS. REFER TO GEOTECHNICAL ENGINEER FOR BELOW SLAB ON GRADE, SUBGRADE PREPARATION REQUIREMENTS (4" MINIMUM APPROVED GRADE). (SEE PLAN)

2. WHERE SPECIFIC CONTROL JOINT LOCATIONS ARE NOT INDICATED, PROVIDE CONTROL/CONSTRUCTION JOINTS SUCH THAT NO AREA EXCEEDS 144 SQUARE FEET, NOR SHALL THE LENGTH OF ANY PANEL EXCEED 1.5 TIMES THE WIDTH. SEE DETAILS ON S3.1 AND ARCHITECTURAL CONCRETE SCHEDULE PLAN.

3. CONDUITS AND PIPES EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSIONS THAN ONE-THIRD THE OVERALL THICKNESS OF THE SLAB. SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS OF CENTER. MINIMUM SLAB THICKNESS OF 2 1/2" MUST BE MAINTAINED OVER THE EMBEDDED CONDUITS AND PIPES.

4. COORDINATE THE EXACT LOCATION AND EXTENTS OF ALL FLOOR SLOPES, RECESSED AREAS AND DRAIN LOCATIONS WITH ARCHITECTURAL AND PLUMBING DRAWINGS.

SPECIAL INSPECTION NOTES:

A. THE SPECIAL INSPECTOR SHALL BE ENGAGED BY THE OWNER. SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED BY THE LOCAL BUILDING OFFICIAL, AND SHALL BE ACCEPTABLE TO THE ARCHITECT.

B. THE SPECIAL INSPECTOR SHALL PROVIDE VERIFICATION OF CONSTRUCTION QUALITY CONTROL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL CERTIFY THAT ALL WORK REQUIRING INSPECTION IS PERFORMED IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS, BUILDING CODE REQUIREMENTS AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.

C. SPECIAL INSPECTIONS ARE REQUIRED FOR THE ITEMS NOTED IN THE STATEMENT OF SPECIAL INSPECTIONS AND THE 2012 IBC CHAPTER 17. THE CONTRACTOR SHALL OBTAIN A COPY OF THE STATEMENT OF SPECIAL INSPECTIONS AND NOTIFY THE SPECIAL INSPECTOR WHEN WORK IS READY TO BE INSPECTED.

D. FAILURE TO NOTIFY THE SPECIAL INSPECTOR PRIOR TO OBSCURING AN ITEM REQUIRING INSPECTION MAY RESULT IN THE CONTRACTOR REMOVING OTHER WORK TO ALLOW INSPECTION. THIS WORK WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. FAILURE TO HAVE REQUIRED ITEMS INSPECTED IS REASON FOR REJECTION OF THE WORK.

E. PREMATURITY NOTIFICATION FOR INSPECTIONS WILL RESULT IN ADDITIONAL INSPECTION WITH ALL EXPENSES AND FEES PAID FOR BY THE CONTRACTOR.

F. SEE SHEET S5.1 FOR SPECIAL INSPECTION CHECKLIST.

REINFORCED CONCRETE NOTES:

1. STRUCTURAL MEMBERS OF REINFORCED CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI318.

2. ALL CONCRETE SHALL HAVE A SLUMP OF 4" (+/-1") AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH:

- A. FOOTINGS: 3000 PSI (0.50 MAXIMUM WATER/CEMENT RATIO).
B. WALLS: 3000 PSI (0.50 MAXIMUM WATER/CEMENT RATIO).
C. SLAB ON GRADE: 4000 PSI (540 LBS/CUBIC YARD MINIMUM CEMENTITIOUS MATERIAL) (0.50 MAXIMUM WATER/CEMENT RATIO).

3. ALL STEEL REINFORCEMENT SHALL BE ASTM 615-GRADE 60. ALL WELDED STEEL REINFORCEMENT SHALL BE ASTM A706-GRADE 60. WELDED WIRE REINFORCEMENT SHALL BE ASTM A185. ALL WELDED REINFORCEMENT SHALL BE IN ACCORDANCE WITH AWS D1.4.

4. MINIMUM CONCRETE COVER FOR REINFORCING STEEL: (UNO)

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"

B. CONCRETE EXPOSED TO EARTH AND WEATHER:
#6 REBAR AND SMALLER: 1 1/2"
#6 REBAR AND LARGER: 2"

C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.
SLABS, WALLS AND JOISTS:
#4 OR #6 REBARS: 1 1/2"
#1 REBAR AND SMALLER: 3/4"
BEAMS AND COLUMNS: 1 1/2"

5. UNLESS NOTED OTHERWISE, CAST IN PLACE CONCRETE SHALL HAVE THE FOLLOWING STEEL ADDED AROUND ALL OPENINGS:
2-#6 (LENGTH OF OPENING+ 48") ALONG EACH SIDE OF OPENING AND TWO (2)-#5x9'-0" DIAGONALLY AT EACH CORNER

6. ALL CONCRETE COMPRESSIVE STRENGTH TESTS SHALL BE AVAILABLE AT JOB SITE.

7. ALL LAP SPLICE LENGTHS SHALL BE AS SHOWN IN TABLE 2 THIS SHEET

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REVISIONS table with columns for description and date.

PROJECT: Canvas Church Addition
ADDRESS: 3560 Browns Bridge Road, Cumming, GA 30028



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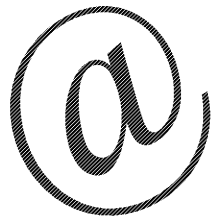
SHEET TITLE: STRUCTURAL GENERAL NOTES & SCHEDULES

Date: 05/24/2017

PROJECT NUMBER: 17-144

SHEET NUMBER: S0.1

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HAIRPIN SCHEDULE table with columns for MARK, HAIRPIN REINFORCING, and values for HP1, HP2, #4, #6.

Structural Foundation Schedule table with columns for Type Mark, Footing Dimensions, Reinforcing, and Remarks.

REINFORCED CONCRETE TENSION LAP SPLICE LENGTHS TABLE 2 (INCHES) with columns for BAR SIZE, fc=3000 PSI, and fc=4000 PSI.

LIST OF ABBREVIATIONS table listing various construction terms and their abbreviations.