

GENERAL NOTES

- 1.0 THIS PROJECT HAS BEEN DESIGNED FOR THE WEIGHTS AND MATERIALS INDICATED ON THE DRAWINGS AND FOR THE LIVE LOADS INDICATED IN THE DESIGN DATA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING AND SHORING, ETC.
1.1 COORDINATE THESE DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL DRAWINGS. ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE FEET & INCHES (ENGLISH) UNLESS NOTED OTHERWISE.
1.2 THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL FLOOR AND ROOF OPENING SIZES AND LOCATIONS, EQUIPMENT PAD SIZES AND LOCATIONS, ANCHOR BOLT LAYOUTS, ETC. WITH EQUIPMENT SELECTED. THE CONTRACTOR SHALL MAKE ANY REQUIRED MODIFICATIONS AT NO ADDITIONAL COST.
1.3 THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSERTS OR OPENINGS, ETC. NOT HEREIN INDICATED.
1.4 NOT USED
1.5 NOT USED
1.6 WORK NOT INCLUDED ON THE DRAWINGS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES ELSEWHERE ON THE DRAWINGS SHALL BE REPEATED.
1.7 IN CASE OF CONFLICT BETWEEN THE NOTES, DETAILS AND SPECIFICATIONS THE MOST RIGID REQUIREMENTS SHALL GOVERN.
1.8 NOT USED
1.9 SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING CMU PARTITIONS. PROVIDE COMPRESSIBLE FIRESAFING AT TOP OF WALL AS REQUIRED BY ARCHITECTURAL DRAWINGS.
1.10 STRUCTURES ARE DESIGNED FOR THE COMPLETED CONDITION. ANY SHORING OR TEMPORARY LATERAL BRACING NECESSARY TO KEEP ELEMENTS STABLE DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
2.0 FOUNDATION NOTES
2.1 GEOTECHNICAL INFORMATION FOR THIS PROJECT WAS TAKEN FROM THE GEOTECHNICAL INVESTIGATION PERFORMED BY "SOILS SECTION GEOTECHNICAL & HTRW BRANCH, U.S. ARMY ENGINEER DISTRICT, SAVANNAH MAY 2006".
2.2 SEE THE SPECIFICATION REQUIREMENTS FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND THE SLAB ON GRADE SUBGRADE INCLUDING COMPACTION PROCEDURES.
2.3 FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION WHICH DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE CONTRACTING OFFICER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED. SEE PROJECT SPECIFICATIONS.
2.4 NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, ICE OR LOOSE MATERIAL.
2.5 ALL SLAB-ON-GRADE, SHALL BE PLACED OVER A 4" #57 STONE WATER BARRIER PLACED ON SUBGRADE PROPERLY PREPARED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. VAPOR BARRIER SHALL BE PLACED OVER CRUSHED STONE.
2.6 SEE PLUMBING, ELECTRICAL & CIVIL DRAWINGS FOR REQUIRED UNDERSLAB UTILITIES.
2.7 NOT USED.
2.8 IF UNDERMINING OF FOOTINGS OCCURS, FILL VOIDS WITH 2000 PSI CONCRETE. DO NOT ATTEMPT TO REPLACE AND RECOMPACT SOIL.
3.0 CONCRETE
3.1 CONCRETE SHALL HAVE THE UNIT WEIGHT AND THE MINIMUM COMPRESSIVE STRENGTHS (f'c) AT 28 DAYS AS SHOWN ON THE CONCRETE MATERIALS SCHEDULE. (DWG S002) SEE SPECIFICATIONS FOR FURTHER INFORMATION. ENTRAIN AIR TO PRODUCE TOTAL AIR CONTENT ACCORDING TO THE SPECIFICATIONS. FOR CONCRETE EXPOSED TO FREEZING TEMPERATURES.
3.2 NOT USED
3.3 NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
3.4 MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO AC1-301.
3.5 ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF 318-05, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", AND CONTRACT SPECIFICATIONS. WHEN THERE IS A CONFLICT BETWEEN ACI AND SPECIFICATIONS, THE MORE STRINGENT SHALL GOVERN.
3.6 CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4" x 45 DEGREE CHAMFER UNO.
3.7 CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60, REINFORCING BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT, UNLESS INDICATED ON THE CONTRACT DOCUMENTS. ALL LAP SPLICES SHALL BE CLASS "B" U.N.O.
3.8 HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS. OR CORNER BARS OF EQUIVALENT SIZE LAPPED WITH A CLASS B TENSION SPLICE AT CORNERS AND INTERSECTIONS. TOP BAR CRITERIA SHALL APPLY IF 11 3/4" OR MORE OF FRESH CONCRETE IS PLACED BELOW BAR.
3.9 SLABS-ON-GRADE SHALL HAVE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS AS SHOWN ON THE DRAWINGS. CONSTRUCTION JOINTS CAN BE USED AT CONTROL JOINT LOCATIONS AT CONTRACTORS OPTION. SEE SLAB PLANS & JOINT DETAILS FOR ADDITIONAL INFORMATION.
3.10 SEE SPECIFICATIONS FOR ALL WATERPROOFING/DAMPPROOFING DETAILS.
3.11 ALL WELDED WIRE FABRIC SHALL CONFORM TO THE STANDARDS OF ASTM A-185. SUPPLY IN FLAT SHEETS.
3.12 ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED, AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-05, AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315-04.

- 3.13 SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
3.14 ALL WELDED WIRE FABRIC SHALL BE LAPPED TWO (2) FULL MESH PANELS AND TIED SECURELY.
3.15 ALL DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING, UNLESS NOTED OTHERWISE ON DRAWINGS.
3.16 SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES.
3.17 THE SUB-CONTRACTOR SHALL VERIFY ALL OPENINGS, PAD SIZES, AND ANCHOR BOLTS WITH EQUIPMENT SELECTED.
3.18 PROVIDE CONCRETE POUR STOPS OR FORMED AS REQUIRED FOR INSTALLATION OF ALL CONCRETE WORK.
3.19 PROVIDE ADDITIONAL 2-#4 x 3'-0" REINFORCING BARS IN SLAB-ON GRADE AT ALL RE-ENTRANT CORNERS. PLACE BARS AT MID-DEPTH OF SLAB WITH A CLEARANCE OF 2" FROM CORNER U.N.O.
4.0 CONCRETE MASONRY
4.1 MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THESE CONTRACT DOCUMENTS AND THE PROJECT SPECIFICATIONS.
4.2 THE SPECIFIED ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'm) ON THE NET AREA IS A MINIMUM OF 1500 PSI.
4.3 PROVIDE TWO #5 BARS CONTINUOUS IN ALL BOND BEAMS, UNLESS OTHERWISE INDICATED IN THE DRAWINGS. REINFORCEMENT PLACED IN BOND BEAMS SHALL BE CONTINUOUS WITH STANDARD ACI HOOKS AT EACH END. PROVIDE STANDARD BAR SPLICES AS SPECIFIED.
4.4 PROVIDE VERTICAL REINFORCEMENT IN ALL WALLS. PROVIDE VERTICAL BARS AT EACH END OF ALL WALLS. PROVIDE VERTICAL BARS ON EACH SIDE OF OPENINGS IN ALL WALLS. PROVIDE STANDARD BAR SPLICES AS SPECIFIED. ALL VERTICAL REINFORCEMENT EXTENDS FULL HEIGHT OF WALL. SEE TYPICAL MASONRY DETAILS DWG S501.
4.5 BLOCK CELLS THAT REQUIRE VERTICAL REINFORCING BARS AS INDICATED ON THE CONTRACT DRAWINGS AND/OR SPECS SHALL BE PLACED IN CENTERS OF BLOCK CELLS U.N.O.
4.6 PROVIDE LADDER TYPE JOINT REINFORCEMENT AT 16" ON CENTER MAXIMUM UNO MINIMUM WIRE SIZE USED SHALL BE 9 GA. DEFORMED WIRE AND CONFORM TO ASTM A82, UNO.
4.7 PROVIDE CONTROL JOINTS AT MAJOR CHANGES IN WALL HEIGHT, CHANGES IN WALL THICKNESS, AT FLOOR CONTROL JOINTS, AT WALL OPENINGS, AND NEAR RETURN ANGLES OF L, T, AND U SHAPED STRUCTURES. CONTROL JOINT SPACING SHALL NOT EXCEED THE DISTANCES INDICATED ON THE ARCHITECTURAL DRAWINGS.
4.8 GROUT FOR MASONRY SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. GROUT SHALL CONFORM TO ASTM C476. GROUT LIFTS SHALL NOT EXCEED 4'-0". MAXIMUM COARSE AGGREGATE SIZE SHALL BE 3/8".
4.9 FILL ALL BOND AND LINTEL BEAMS AND CELLS AT VERTICAL REINFORCEMENT WITH GROUT.
4.10 USE MORTAR TYPE S CONFORMING TO ASTM C270, SEE SPECIFICATIONS.
4.11 CONCRETE MASONRY UNITS SHALL BE AS INDICATED IN SPECIFICATIONS.
4.12 ALL CELLS, OPEN CAVITIES, AND AIR SPACES BELOW GRADE SHALL BE GROUTED.
4.13 BOND BEAMS AND REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS (UNO). MAXIMUM CONTROL JOINT SPACING SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
4.14 CONTRACTOR SHALL COORDINATE LOCATION OF ALL OPENINGS SEE ARCH., MECH., ELEC., AND PLUMBING DWGS. FOR SIZE AND LOCATION OF OPENINGS.
4.15 "SEE DRAWING S501 FOR LINTELS AND ADDITIONAL REINFORCING AT OPENINGS".
4.16 SECURE VERTICAL BARS AGAINST ANY MOVEMENT WITH POSITIONERS OR OTHER ACCEPTABLE METHOD PRIOR TO GROUTING THE CELLS. "WET-STICKING" REBAR IN VERTICAL CELLS AFTER GROUT IS PLACED IS NOT PROPER PROCEDURE.
4.17 GROUT SHALL NOT BE POURED INTO BOND BEAMS VIA THE VERTICALLY GROUTED CELLS ABOVE.
5.0 STEEL DECK
5.1 STEEL DECK SHALL BE ASTM A446 HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI AS PER THE STEEL DECK INSTITUTE DESIGN MANUAL.
5.2 STEEL DECK SHALL BE ERECTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND ERECTION LAYOUTS AND CONNECTED TO SUPPORTING MEMBERS AS INDICATED BELOW.
5.3 ROOF DECK
5.3.1 STEEL ROOF DECK SHALL BE 1 1/2", 20 GA. GALVANIZED WIDE RIB (S.D.I. TYPE) UNO.
5.3.2 ROOF DECK SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
MOMENT OF INERTIA, I 0.212IN^4/FT WIDTH
SECTION MODULUS (TOP OF DECK), Sx 0.247IN^3/FT WIDTH
SECTION MODULUS (BOT. OF DECK) Sp 0.234IN^3/FT WIDTH
IN ADDITION TO MEETING THE MINIMUM REQUIREMENTS ABOVE, THE DECK MANUFACTURER SHALL DESIGN THE ROOF DECK AND ATTACHMENTS TO STEEL FOR THE ROOF LOADS, INCLUDING DECK UPLIFT. ALL ROOF DECK SHALL HAVE A MINIMUM 3-SPAN CONDITION.
5.3.3 ROOF DECK SHALL BE CONNECTED TO SUPPORTS WITH 5/8" PUDDLE WELDS IN THE BOTTOM OF THE FLUTES USING A S.D.I. 36/5 PATTERN (UNO). DECK SIDELAPS SHALL BE FASTENED USING #10 SCREWS WITH MINIMUM 3-SIDE LAPS CONNECTIONS PER SPAN. ALL ENDLAPS SHALL BE A MINIMUM OF 2" AND SHALL OCCUR OVER SUPPORTS. MINIMUM DIAPHRAGM SHEAR STRENGTH Q = 487 LBS/FT (UNO).
5.3.4 DO NOT SUSPEND PIPES, DUCTS, OR CEILING FROM ROOF DECK.

- 6.0 STRUCTURAL STEEL
6.1 STRUCTURAL STEEL ROLLED SHAPES AND PLATES SHALL CONFORM TO THE MATERIAL INFORMATION SCHEDULE ON DWG. S002. DIMENSIONS AND PROPERTIES SHALL BE IN ACCORDANCE TO ASTM A6M.
6.2 NOT USED
6.3 CONNECTION BOLTS FOR STRUCTURAL STEEL MEMBERS SHALL BE 3/4" A325-N, UNO, AND SHALL CONFORM TO ASTM A325; NUTS SHALL CONFORM TO ASTM A563; WASHERS SHALL CONFORM TO ASTM F436. CONNECTION BOLTS SHALL HAVE A HARDENED WASHER PLACED UNDER THE ELEMENT TO BE TIGHTENED.
6.4 DETAILING OF STRUCTURAL STEEL CONNECTIONS MUST BE CONSISTENT WITH RECOGNIZED, PUBLISHED METHODS SUCH AS IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9th EDITION; "ENGINEERING FOR STEEL CONSTRUCTION", OR VOLUME II CONNECTIONS MANUAL OF STEEL CONSTRUCTION".
6.4.1 SECTION A7 OF AISC 9TH EDITION ASD IS AMENDED SUCH THAT THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL CONNECTIONS.
6.5 STRUCTURAL STEEL CONNECTIONS SHALL BE DETAILED BY THE CONTRACTOR IN ACCORDANCE WITH THE AISC "MANUAL OF STEEL CONSTRUCTION-ALLOWABLE STRESS DESIGN", NINTH EDITION. CONNECTIONS SHALL BE DESIGNED TO DEVELOP A MINIMUM END REACTION OF 12.0 KIPS.
6.6 NOT USED
6.7 NOT USED
6.8 NOT USED
6.8.1 NOT USED
6.8.2 NOT USED
6.9 NOT USED
6.10 WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE AWS D1.1. ELECTRODES FOR SHOP AND FIELD WELDS SHALL BE CLASS E70XX. ALL WELDING SHALL BE DONE BY QUALIFIED, CERTIFIED WELDERS PER THE ABOVE STANDARD.
6.11 SHOP AND FIELD TESTING OF WELDS AND BOLTS SHALL BE AS OUTLINED IN THE SPECIFICATIONS.
6.12 ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" UNLESS NOTED OTHERWISE
6.13 THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
6.14 NOT USED.
6.15 ALL STRUCTURAL STEEL SHALL BE PRIMED AS PER THE SPECIFICATIONS.
6.16 ALL PLATES NOT INDICATED SHALL BE 1/2" MIN THICKNESS. ALL ANGLES NOT INDICATED SHALL BE 3x3x5/16 MIN.
6.17 NOT USED
7.0 LIGHT GAUGE STEEL FRAMING NOTES:
7.1. ALL MEMBER DESIGN, SIZES AND NOMENCLATURE, ETC. ARE BASED ON STEEL STUD MANUFACTURERS ASSOCIATION'S (SSMA) PRODUCT TECHNICAL INFORMATION UTILIZING AISI 1996 COLD FORMED STEEL DESIGN MANUAL. ANY VARIATION FROM SSMA INFORMATION REQUIRES AN APPROVAL WITH COMPLETE TECHNICAL DATA, INCLUDING PROFILES, DESIGN CALCULATIONS, ETC. STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.
7.2. ALL STUDS, TRACKS AND JOISTS OF 18, 16, 14 OR 12 GAUGE TO BE CORROSION RESISTANT A653 CLASS 1, WITH A YIELD STRENGTH OF 50,000 PSI.
7.3. ALL STUDS, TRACKS AND JOISTS OF 20 OR 22 GAUGE TO BE CORROSION RESISTANT A653 GRADE 33, WITH A YIELD STRENGTH OF 33,000 PSI.
7.4. ALL BRIDGING AND CONNECTION PIECES TO BE CORROSION RESISTANT A653 GRADE 33, WITH A YIELD STRENGTH OF 33,000 PSI.
7.5. STUD AND JOISTS CONNECTIONS TO STUDS AND JOISTS THAT ARE TO BE WELDED SHALL BE BY AWS LIGHT GAUGE CERTIFIED WELDERS. MIN. WELD LENGTH = 1". ALL WELDS SHALL BE WIRE BRUSHED AND COATED WITH A ZINC RICH PRIMER OR GALVANIZING REPAIR PRODUCT.
7.6. TOP CHORD OF ALL TRUSSES SHALL BE 20 GA. (0.0358 IN), MINIMUM.
7.7. WHEN SCREWS ARE USED FOR CONNECTIONS, THE MINIMUM SPACING IS 7/8" AND 1/2" FOR CLEARANCE TO MEMBER EDGE.
7.8. TRACK, BRIDGING AND CONNECTION PIECES TO BE WELDED OR SCREWED USING SELF TAPPING S-12 SCREWS, MIN. NO. 8.
7.9. ATTACHMENT OF TRACK OR CONNECTION PIECES TO CONCRETE SHALL BE AS SHOWN ON DESIGN DRAWINGS.
7.10. LATERAL BRIDGING SHALL BE PROVIDED AS REQUIRED.
7.11. NO SPLICES ARE ALLOWED IN STUDS OR JOISTS, SPLICES IN TRACK OR CONTINUOUS CONNECTION PIECES SHALL SUPPLY THE FULL STRENGTH OF THE MEMBER SPLICED.
7.12. ALL MEMBERS ARE TO BE INSTALLED PLUMB, LEVEL OR IN LINE WITH THE SLOPE OF THE STRUCTURE.
7.13. NO TEMPORARY OR PERMANENT LOADS SHALL BE PLACED ON JOIST BRIDGING OR TRUSS BRIDGING.
7.14. DURING CONSTRUCTION, TEMPORARY ERECTION BRACING, SHORING AND/OR SUPPORTS SHALL BE PROVIDED AS REQUIRED TO INSURE STRUCTURAL STABILITY UNTIL ALL STRUCTURAL COMPONENTS ARE PROPERLY INSTALLED, ALIGNED AND SECURED.
7.15. TRUSS DESIGN IS THE RESPONSIBILITY OF THE LIGHT GAUGE STEEL FRAMING SUPPLIER'S ENGINEER. TRUSS CALCULATIONS SHALL BE IN ACCORDANCE WITH LOADS ON THESE DRAWINGS. CALCULATIONS SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED TO THE OFFICER IN CHARGE OF CONSTRUCTION.
7.16. THE ROOF DECK FORCES ARE TRANSFERED TO THE MASONRY SHEAR WALLS THROUGH THE COLD-FORMED METAL TRUSSES AND THEIR CONNECTIONS TO THE SHEAR WALLS. DESIGN RESPONSIBILITY IS THAT OF THE TRUSS SUPPLIER'S ENGINEER.

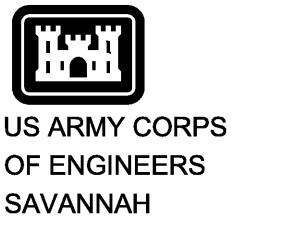


Table with columns: SYMBOL, DESCRIPTION, DATE, BY

Table with columns: DATE, SOLICITATION NO., CONTRACT NO., CATEGORY CODE, PLOT DATE, DESIGNED BY, CND BY, DWN BY, SUBMITTED BY, FILE NAME, SIZE, PLOT SCALE

ALBRITTON JUNIOR HIGH SCHOOL ADDITION
FT BRAGG NORTH CAROLINA
GENERAL NOTES

PLATE REFERENCE NUMBER S-001 SHEET 30