

A. GENERAL

1. THE STRUCTURES ARE DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THEY ARE FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO INSURE THE SAFETY OF THE STRUCTURES AND THEIR COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUTS OR THE DOWNS WHICH WHICH BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THE COMPLETION OF THE PROJECT.
2. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE INVOLVED TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS TO BE BORNE BY THE APPROPRIATE CONTRACTOR.

C. STRUCTURAL STEEL

1. MATERIALS:
 - a. STRUCTURAL STEEL: ASTM A572, F_y=50 KSI; HIGH STRENGTH BOLTS: ASTM A325 OR A490; ANCHOR BOLTS: ASTM A307 OR A36; ELECTRODES: SERIES E70; STRUCTURAL PRES: ASTM A53 OR A501, F_y = 35 KSI MIN; SQUARE AND RECTANGULAR TUBING: ASTM A500, F_y = 46 KSI; EXPANSION BOLTS: HILLI "MMK-BOLTS" 1/2" OR APPROVED EQUAL.
 2. SPECIFICATION: WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1, UNLESS SPECIFICALLY SHOWN OTHERWISE; DESIGN, FABRICATION AND ERECTION TO BE GOVERNED BY:
 - a. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LATEST EDITION);
 - b. AISC CODE OF STANDARD PRACTICE (LATEST EDITION);
 - c. STRUCTURAL WELDING CODE, AWS D1.1 OF THE AMERICAN WELDING SOCIETY;
 - d. SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS (LATEST EDITION).
 3. FINISH:
 - a. ALL STEEL TO BE HOT-DIPPED GALVANIZED
 5. MISCELLANEOUS:
 - a. PROVIDE HOLES FOR OTHERS. IF OPENING IS NOT SHOWN ON THE STRUCTURAL DRAWINGS, OBTAIN PRIOR APPROVAL.
 - b. STEEL BELOW GRADE TO BE PROTECTED BY A MINIMUM OF 4 INCHES OF CONCRETE COVER.
 - c. EMBEDMENT LENGTH OF EXPANSION BOLTS INTO SOLID MASONRY OR CONCRETE SHALL BE 6 INCHES UNO.

FOUNDATION NOTES

1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF. ALLOWABLE BEARING PRESSURE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR'S SOILS ENGINEER. THE CONTRACTOR'S SOILS ENGINEER SHALL ALSO VERIFY THAT THE SOIL IS SUITABLE FOR PLACEMENT OF THE FOUNDATION SYSTEM AND THAT MAXIMUM SETTLEMENT IS 1" AND MAXIMUM DIFFERENTIAL SETTLEMENT IS 1/2".
2. EXCAVATIONS ARE ASSUMED TO BE LAD BACK TO A 1 TO 1 SLOPE. IF REQUIRED SHEETING OR SHORING TO BE INSTALLED TO MAINTAIN THE 1 TO 1 SLOPE. KEEP ALL EXCAVATIONS FREE OF WATER.
3. SEE HVAC, PLUMBING & ARCHITECTURAL DRAWINGS FOR ALL FLOOR SLOPES, PLACING SLABS, DEPRESSIONS, ETC. VERIFY ALL INFORMATION PRIOR TO START OF WORK.

B. REINFORCED CONCRETE

1. MATERIALS:
 - a. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301-99 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
 - b. STRUCTURAL CONCRETE: (USE CRUSHED LIMESTONE FOR COARSE AGGREGATE.)

CLASS LOCATION f_c, PSI

I	NOT USED	3000
II	NOT USED	4000
III	WALLS, FOOTINGS, EXTERIOR SLAB ON GRADE AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED	4000 WITH AIR
IV	BACKFILL BELOW FOOTINGS	1500

2. CONTINGENCIES:
 - a. PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID, AND ARE NOT PART OF THE CONTINGENCY QUANTITY LISTED BELOW.
3. FOOTINGS /MATS:
 - a. PROVIDE DOWELS IN FOOTINGS /MATS TO MATCH VERTICAL DOWELS IN WALLS.
 - b. PROVIDE LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
4. SPLICES: UNLESS NOTED OTHERWISE, MINIMUM LAP SPLICE LENGTHS TO BE AS FOLLOWS:
 - a. HORIZONTAL AND VERTICAL BARS 48 DIAMETERS
5. CONSTRUCTION JOINTS:
 - a. CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE CONTRACTING OFFICER. ALL CONSTRUCTION JOINTS ARE TO BE KEPTED. METAL KEYS ARE NOT PERMISSIBLE.
6. CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS:
 - a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
 - b. CONCRETE EXPOSED TO EARTH OR WEATHER: 1-1/2 INCHES
 - #5 BARS AND SMALLER 2 INCHES
 - OTHERS 2 INCHES
7. PROVIDE 1" CHAMFER AT ALL EXPOSED CORNERS

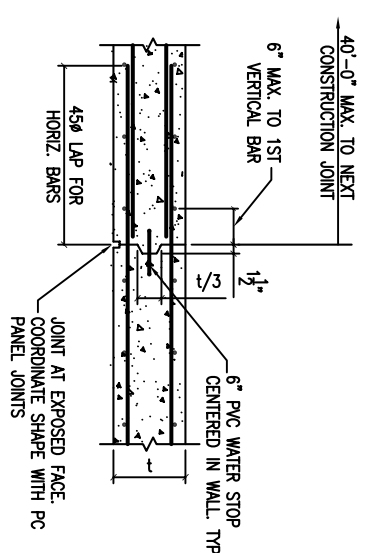
DESIGN LOADS

1. CODE SBC 1999
2. SNOW LOAD
 1. GROUND SNOW LOAD 10 PSF
 2. IMPORTANCE FACTOR 1.0
 3. SNOW EXPOSURE FACTOR (C_e) 1.0
3. LATERAL LOADS
 - WIND LOADS
 1. WIND SPEED 80 MPH
 2. IMPORTANCE FACTOR 1.0
 4. GRAVITY LOADS

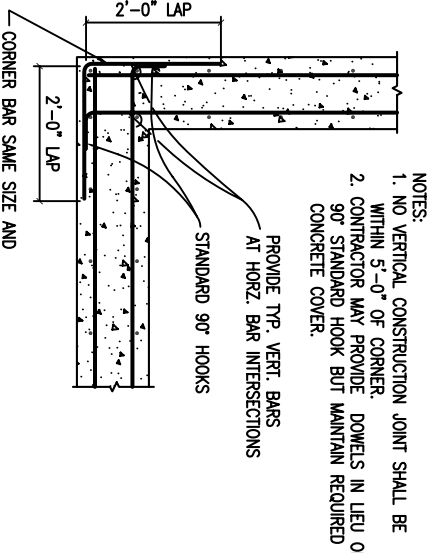
DEAD LOAD	SELFWEIGHT OF STRUCTURE
COLLATERAL LOAD	10 PSF
LIVE LOAD	20 PSF
GROUND LEVEL LIVE LOAD	100 PSF OR 50 PSF + EQUIPMENT LOADS
 5. SEISMIC LOADS

PEAK ACCELERATION, A ₀	0.195
PEAK VELOCITY, V _p	0.195
SEISMIC HAZARD EXPOSURE GROUP	I
SEISMIC PERFORMANCE CATEGORY	C
SOIL PROFILE TYPE	S ₄ , S=2.0
BASIC STRUCTURAL AND SEISMIC SYSTEM	REINFORCED CONCRETE SHEAR WALL
RESPONSE MODIFICATION FACTOR, R	4.5
DEFLECTION AMPLIFICATION FACTOR, C _d	4.0

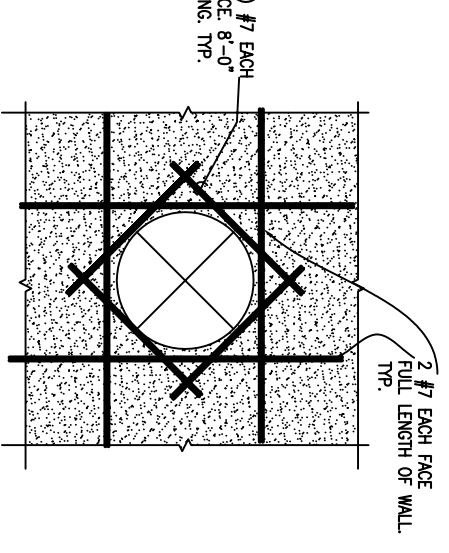
 EQUIVALENT LATERAL FORCE



3A PLAN DETAIL AT WALL CONST. JOINT
SCALE: N.T.S. C-DET001



3B FOUNDATION WALL CORNER REINF.
SCALE: N.T.S. C-DET002



3C TYP. OPENING IN CONCRETE WALL
SCALE: N.T.S. C-DET003

NO.	DATE	BY	APP'D	CHECKED	JOB NO.
				YES	16535.05
REVISIONS					

DESIGNED: OCTOBER 2003
DRAWN: AS SHOWN
CHECKED: YES
JOB NO. 16535.05

ES ENGINEERS, LLC
460 BELLEVILLE AVENUE, SUITE 100
JACKSON, MISSISSIPPI 39201

100% SET

DESOTO COUNTY REGIONAL UTILITY AUTHORITY
UPPER CAMP CREEK INTERCEPTOR NORTH
DESOTO COUNTY, MISSISSIPPI



PROJECT NO.	16535.05
CONTRACT	1
SHEET	S1.01