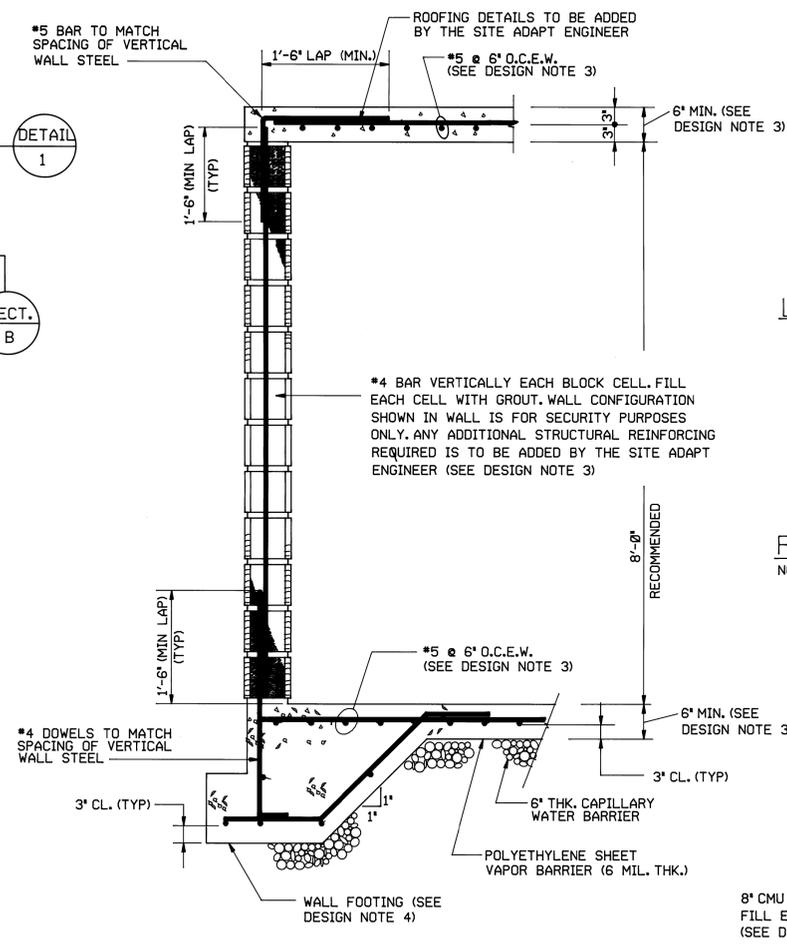
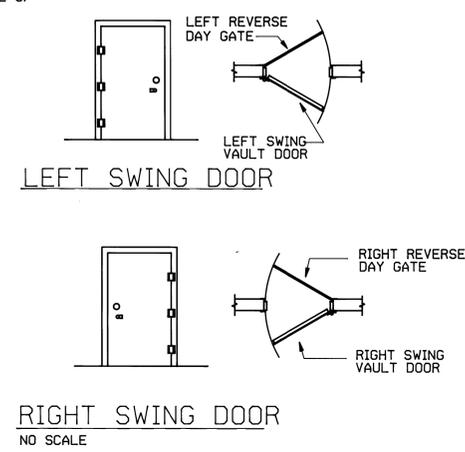


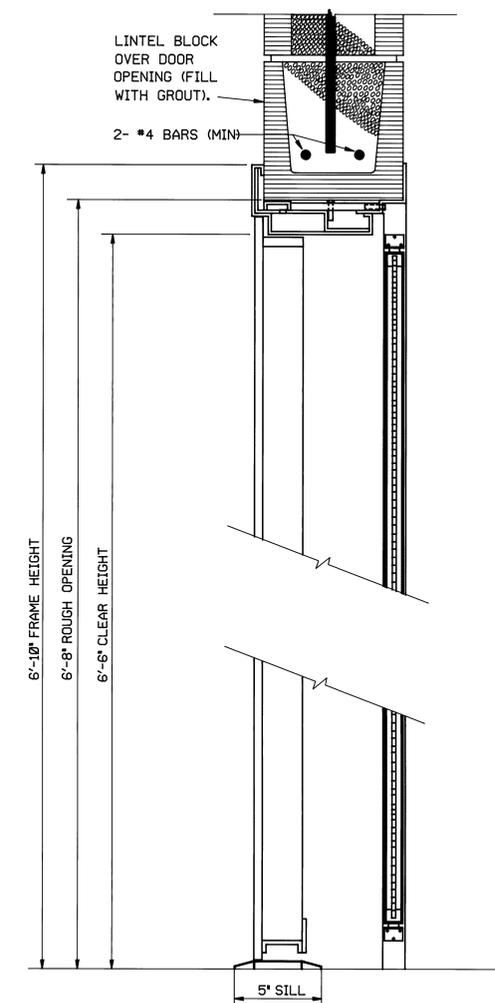
TYPICAL PLAN
SCALE: 1/2" = 1'-0"



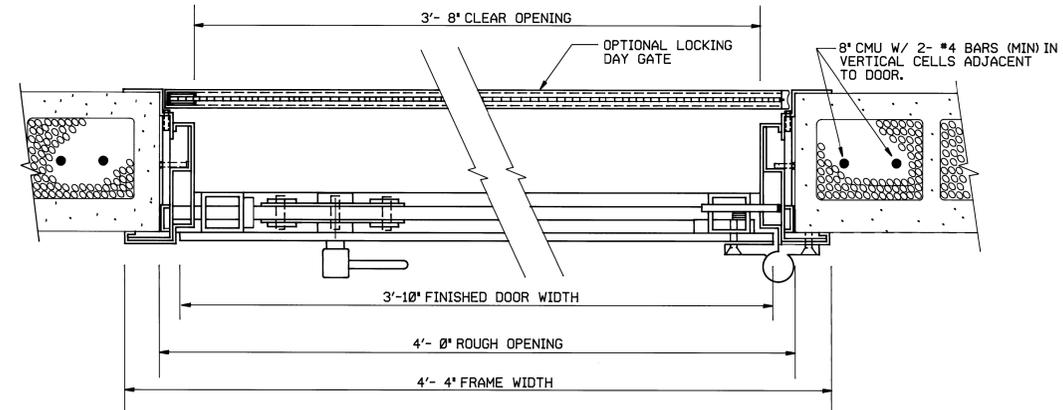
SECTION B
SCALE: 1" = 1'-0"



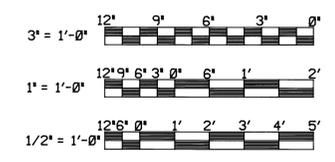
DETAIL 1
SCALE: 1" = 1'-0"



SECTION A
SCALE: 3" = 1'-0"



DETAIL 2
SCALE: 3" = 1'-0"



SPECIFICATIONS

1. HARDWARE SHALL BE HEAVY DUTY BUILDERS HARDWARE. ALL SCREWS, NUTS BOLTS, CLAMPS, HINGES, PINS, ETC., SHALL BE SECURELY FASTENED TO PRECLUDE UNAUTHORIZED REMOVAL AND TO ASSURE VISUAL EVIDENCE OF TAMPERING. HARDWARE ACCESSIBLE FROM OUTSIDE THE AREA MUST BE PEENED, PINNED, BRAZED, OR TACK WELDED TO PRECLUDE REMOVAL.
2. CONCRETE SHALL DEVELOP 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
3. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.
4. THE DESIGN AND CONSTRUCTION OF ALL REINFORCED CONCRETE SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCING CONCRETE (ACI 318).
5. LOAD BEARING CONCRETE MASONRY UNITS SHALL COMPLY WITH ASTM C90, TYPE 1, GRADE N-1.
6. MORTAR SHALL BE TYPE 'S' WITH $F'_c = 1800$ PSI, GROUT $F'_c = 2500$ PSI.

DESIGN NOTES

1. THIS DRAWING IS INTENDED TO BE USED IN CONJUNCTION WITH AR380-5, DEPARTMENT OF THE ARMY INFORMATION SECURITY PROGRAM. THIS DRAWING DEPICTS A CLASSIFIED MATERIAL STORAGE VAULT THAT CONFORMS STRUCTURALLY TO THE REQUIREMENTS OF AR 380-5. HVAC AND LIGHTING REQUIREMENTS ARE TOO SITE SPECIFIC TO BE COVERED ON A GENERAL DRAWING OF THIS TYPE. ANY DUCTS PENETRATING THE VAULT MUST BE BAFFLED AND BARRED.
2. ALL REQUIREMENTS SPECIFIED ARE THE MINIMUM ACCEPTABLE TO ATTAIN A SECRET LEVEL CLASSIFICATION.
3. THE VAULT WALL WILL BE CONSTRUCTED OF VERTICAL CELL, LOAD BEARING CONCRETE MASONRY UNITS AT LEAST 8-INCHES THICK EMPLOYING ADEQUATE BOND. ALL CELLS WILL HAVE A #4 OR LARGER REINFORCING BAR, AND WILL BE FILLED WITH GROUT. THE FLOOR AND CEILING WILL BE 6 INCH THICK CONCRETE (MIN.) WITH #5 REINFORCING BARS (MIN.) AT 6 INCHES ON CENTER EACH WAY. THE ABOVE SPECIFIED CONCRETE THICKNESS AND REINFORCING IS FOR SECURITY ONLY. IT WILL BE THE RESPONSIBILITY OF THE SITE ADAPT ENGINEER TO ADD ANY ADDITIONAL CONCRETE THICKNESS OR REINFORCING THAT MAY BE REQUIRED TO INSURE THAT THE FLOOR, WALLS, AND CEILING MEET THE DEAD LOAD, LIVE LOAD, AND SEISMIC REQUIREMENTS OF THE SITE.
4. ALL FOOTING DETAILS INCLUDING FOOTING DEPTH, FOOTING WIDTH, AND REINFORCING REQUIREMENTS ARE TO BE DETERMINED BY THE SIDE ADAPT ENGINEER IN ACCORDANCE WITH THE LOCAL SITE CONDITIONS AND WALL LOADING.
5. THE VAULT SHALL BE EQUIPPED WITH A CLASS 5 DOOR OF A TYPE PRESENTLY LISTED ON THE FEDERAL SUPPLY SCHEDULE. TO PREVENT UNDUWE WEAR ON THE VAULT DOOR AND EVENTUALLY WEAKEN THE LOCKING MECHANISM, AN OPTIONAL LOCKING DAY GATE IS RECOMMENDED.
6. THE VAULT SHALL HAVE THE FOLLOWING AS A MINIMUM FOR THE INTRUSION DETECTION SYSTEM (IDS):
 - A. HEAT DETECTOR MOUNTED ON THE INSIDE OF VAULT DOOR.
 - B. A VOLUMETRIC SENSOR.
 - C. A BALANCED MAGNETIC SWITCH MOUNTED ON THE INSIDE OF THE VAULT DOOR.
 - D. A SMOKE DETECTOR CONNECTED TO THE BUILDING FIRE DETECTION SYSTEM.
 - E. THE NUMBER OF DEVICES REQUIRED WILL VARY DEPENDING ON THE SIZE OF THE VAULT.

Symbol	Description	Date	Approved
Revisions			
U S ARMY ENGINEER DIVISION, HUNTSVILLE, CORPS OF ENGINEERS HUNTSVILLE, ALABAMA			
Site adapt A/E :		VAULT, CLASSIFIED MATERIAL STORAGE SECRET, CLASS B ARCHITECTURAL	
PLAN-SECTIONS-DETAILS & SPECS			
Dwn. by : <i>PHS</i>	Ckd. by : <i>CMH</i>	Date : 18 DEC 1987	Sheet reference number : 1-S
Reviewed by : <i>PHS</i>	Approved by : <i>Robert [Signature]</i>	Drawing code : 141-90-02	Design file no. : Rev. : Sheet of