

PROGRAMMING AND PLANNING GUIDES

GENERAL NOTES

1. BASIC CRITERIA AND CONSTRUCTION STANDARDS, EXCEPT AS MODIFIED HEREIN, SHALL BE IN ACCORDANCE WITH DOD CONSTRUCTION CRITERIA MANUAL 4270.1-M.
2. THE SECURE STORAGE OF ARMS AND THE STORAGE OF AMMUNITION AND PYROTECHNICS SHALL CONFORM TO PROVISIONS OF AR 190-11, "PHYSICAL SECURITY OF WEAPONS, AMMUNITION, AND EXPLOSIVES", AND AR 385-64, "AMMUNITION AND EXPLOSIVES SAFETY STANDARDS".
3. THE SECTIONS INDICATED IN THE DEFINITIVE DRAWING ARE NOT MEANT TO ESTABLISH AN ARCHITECTURAL DESIGN TREATMENT OR USE OF SPECIFIC MATERIALS. MATERIALS USED SHALL BE IN ACCORDANCE WITH APPLICABLE CRITERIA FOR THIS FACILITY.
4. THE ARMS STORAGE BUILDING SHALL INCLUDE SIX PERMANENT COMPANY ARMORER'S ROOMS WHICH ALONG WITH THE VAULT, SHALL BE INCLUDED WITHIN ONE COMMON SECURE CORE. THE ARMS VAULT SHALL BE SUBDIVIDED BY MOVABLE STEEL PARTITIONS INTO SMALLER COMPANY ARMS VAULTS, EACH WITH ITS ADJOINING ARMORER'S ROOM. IF LESS THAN SIX COMPANIES USE THE STORAGE FACILITY, THE EXTRA ARMORER'S ROOM OR ROOMS MAY BE SECURED UNTIL FURTHER NEED ARISES. ARMORER'S ROOMS SHALL BE FLEXIBLE TO ACCOMMODATE VARYING NUMBER AND SIZES OF COMPANIES, INCLUDING BUT NOT LIMITED TO EQUAL AREAS FOR FOUR, FIVE, OR SIX COMPANY SUBDIVISIONS AS REQUIRED. SEE ALTERNATE PANEL ARRANGEMENTS AS SHOWN ON THIS SHEET. FLOOR, CEILING, AND WALL ANCHORS SHALL BE PROVIDED AT ALL LOCATIONS, INCLUDING ALTERNATE PANEL LOCATIONS IN GRID AS INDICATED.

ARCHITECTURAL

1. THE EXTERIOR APPEARANCE OF THIS BUILDING SHOULD HARMONIZE WITH THAT OF SURROUNDING STRUCTURES. INTERIOR WALL SURFACES WILL BE MASONRY OR CONCRETE. FLOORS WILL BE EXPOSED CONCRETE. CEILINGS OF THE VAULT AND MECHANICAL ROOM WILL BE EXPOSED CONCRETE. CEILINGS OF OTHER AREAS WILL BE SUSPENDED ACOUSTICAL TILE.
2. THE ISSUE WINDOW/DOOR'S CLEAR OPENING SHALL BE 2'-3" WIDE X 3'-4" HIGH. THE SILL SHALL BE 1'-0" DEEP. BOTTOM OF SILL SHALL BE 3'-4" FROM THE FLOOR.
3. EXTERIOR WINDOWS MUST OFFER A CLEAR VIEW FROM THE EXTERIOR OF INTERIOR AREAS SURROUNDING THE VAULT CORE. WINDOWS SHALL NOT PERMIT ENTRY.
4. SURFACES OF CLEANING COUNTERS SHALL BE 2'-0" DEEP AND 3'-4" FROM THE FINISH FLOOR.

STRUCTURAL

STRUCTURAL DESIGN SHALL BE IN ACCORDANCE WITH DEPARTMENT OF THE ARMY TECHNICAL MANUALS TM 5-809-1, -2, -3, -4, AND -10, AS APPLICABLE. AS A MINIMUM ACCEPTABLE STANDARD, THE CONSTRUCTION OF THE PERMANENT WALLS OF THE VAULT CORE, INCLUDING ALL ARMORER'S ROOMS, SHALL CONSIST OF 8 INCHES MINIMUM THICKNESS CONCRETE BLOCK, REINFORCED WITH NO. 4 BARS IN EACH CAVITY AND EACH CAVITY FILLED WITH MORTAR OR CONCRETE. THIS DOES NOT, HOWEVER, PROHIBIT PROVISION OF A WALL COMPOSITION WHICH PROVIDES A GREATER DEGREE OF SECURITY THAN THE ABOVE (REFER TO AR 190-11). THE ROOF OF THE VAULT SHALL PROVIDE SECURITY EQUIVALENT TO THAT PROVIDED BY THE WALLS. THE FLOOR SLAB SHALL BE A NON-FLOATING TYPE, 6 INCHES THICK, WITH 6X6 1/4" MESH, OR EQUIVALENT CONSTRUCTION, WITH THICKENING UNDER INTERIOR WALLS. PROVIDE ANCHOR RINGS ON VAULT WALLS AT 6' CTRS.

UTILITIES

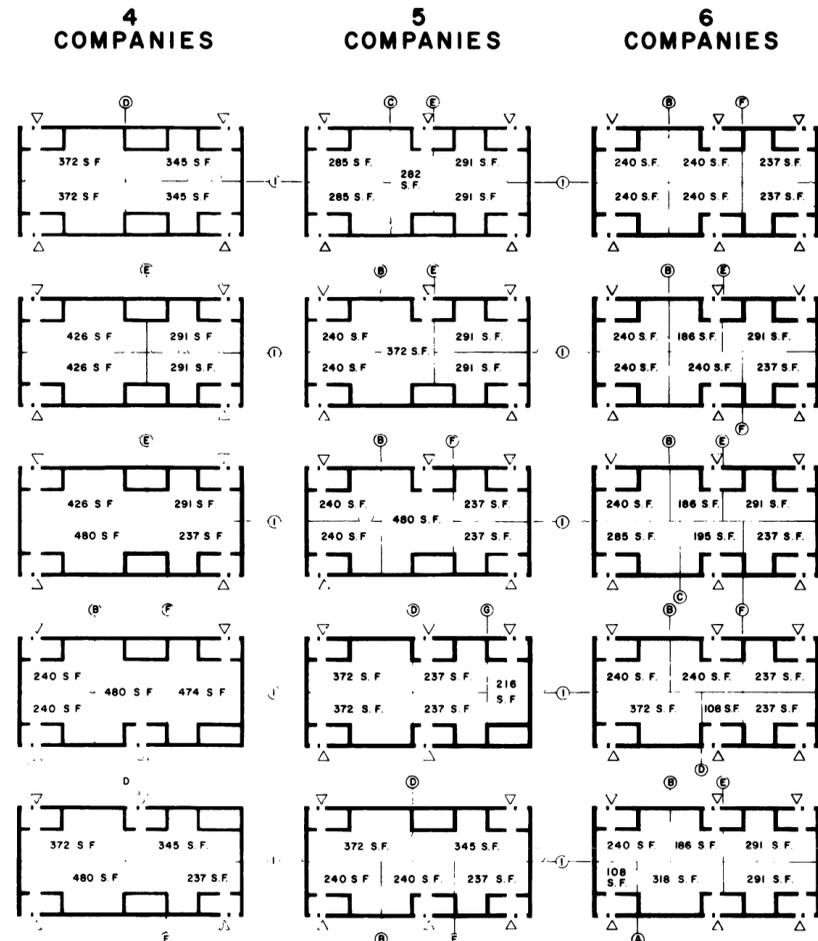
1. THE UTILITY REQUIREMENTS INDICATED BELOW SHALL BE USED AS GENERAL PROGRAMMING GUIDANCE AND AS DESIGN CHECKS. DESIGN CALCULATIONS FOR SPECIFIC CASES SHALL BE BASED UPON THE LATEST ARMY AND DOD CRITERIA. SPECIFIC CONSIDERATIONS SHALL BE GIVEN TO CONSERVATION OF ENERGY RESOURCES IN ALL ASPECTS OF DESIGN.
2. ELECTRICAL - ELECTRICAL DESIGN SHALL BE IN ACCORDANCE WITH TM 5-811-2 AND TM 5-811-3.
3. HVAC - HEATING, VENTILATING AND AIR CONDITIONING SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH TM 5-810-1 AND DOD 4270.1-M.
4. PLUMBING - PLUMBING SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH TM 5-810-5.
5. U-FACTORS USED IN COMPUTING THE UTILITY REQUIREMENTS BELOW ARE AS FOLLOWS:
WALLS - 1.0
ROOF - 0.08
6. ELECTRICAL
KVA LOAD WITH AIR CONDITIONING - ESTIMATED DEMAND 36 KVA.
WIRING IN CLEANING MATERIALS STORAGE SHALL BE EXPLOSION-PROOF.
PROVIDE TELEPHONE OUTLET IN EACH OF THE ARMORER'S ROOMS AND ON INSIDE WALL ADJACENT TO THE MAIN ENTRANCE.
7. HEATING
HEAT REQUIRED (NET OUTPUT) - 311 MBH.
ABOVE REQUIREMENT IS BASED ON 0 DEGREE F. OUTSIDE TEMPERATURE.
8. VENTILATION - (OUTSIDE AIR SUPPLY)
ARMORER'S ROOMS AND ARMS STORAGE VAULTS - 120 CFM OUTSIDE AIR CONTINUOUSLY.
MAINTENANCE AREA AND WEAPONS CLEANING - 11,000 CFM SUMMER AND 10 AC/HR WINTER
9. VENTILATION EXHAUST
FOR ENTIRE BUILDING:
SUMMER 11,120 CFM
WINTER 3,120 CFM
EXHAUST SYSTEM FOR WEAPONS CLEANING AREAS SHALL PROVIDE IMMEDIATE REMOVAL OF SOLVENT FUMES.
10. AIR CONDITIONING AND DEHUMIDIFICATION
ARMORER'S ROOMS AND ARMS STORAGE VAULTS ARE TO BE HEATED, AIR CONDITIONED, AND DEHUMIDIFIED AS INDICATED IN THE ROOM SCHEDULE. NO COOLING OR DEHUMIDIFICATION IS REQUIRED. FRESH HEATING AIR SHALL BE SUPPLIED AT 75 DEGREE DB, 75 DEGREE WB.
TOTAL COOLING CAPACITY: 3.7 TONS OF REFRIGERATION.

(CONTINUED)

ALTERNATE MOVABLE STEEL PANEL LOCATIONS

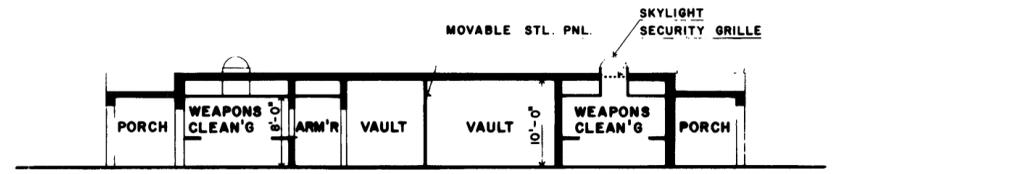
SCALE: 1" = 20'-0"

37 PANELS INCLUDING ALL NECESSARY ANGLES, BOLTS AND ANCHORS TO BE PROVIDED IN CONTRACT



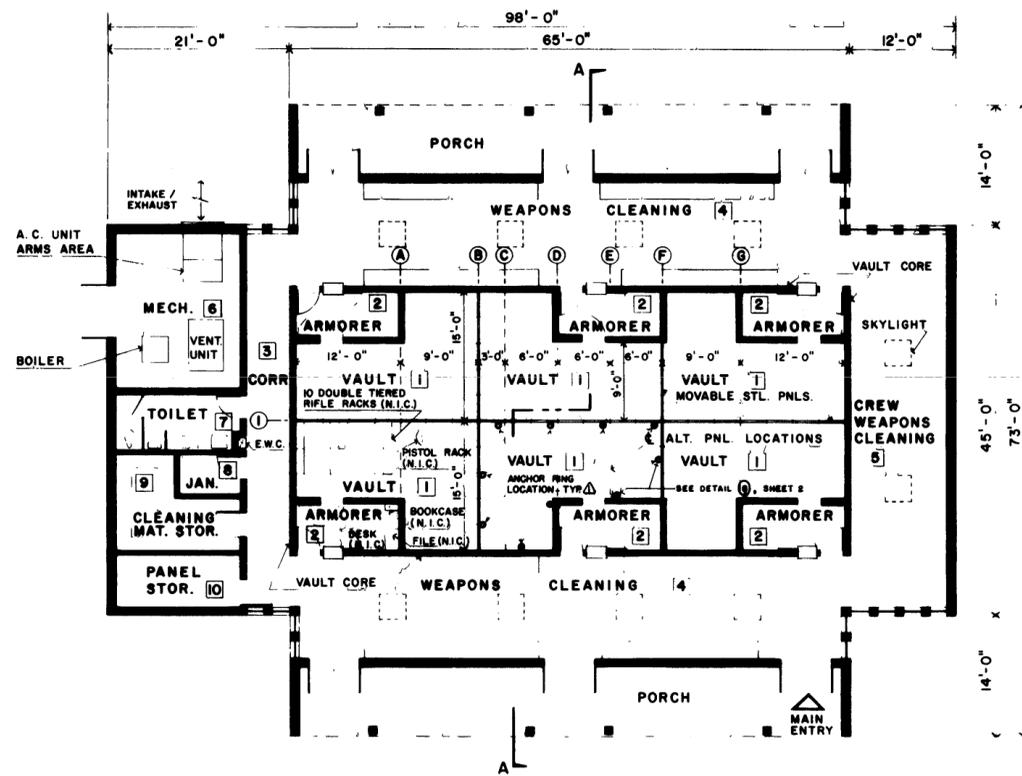
ABBREVIATIONS

AC	AIR CHANGES OR ALTERNATING CURRENT	GA	GAUGE	B	PLATE
A.C.	AIR CONDITIONING	GPD	GALLONS PER DAY	PNL.	PANEL
ADJ.	ADJUSTABLE, ADJUSTING	GPH	GALLONS PER HOUR	PNLS.	PANELS
ALT.	ALTERNATE	GPM	GALLONS PER MINUTE	PSIG	POUNDS PER SQUARE INCH GAUGE
ARM'R	ARMORER	HOR	HORIZONTAL	RM	ROOM
AWG	AMERICAN WIRE GAUGE	HT	HEIGHT	S.F.	SQUARE FEET OR SQUARE FOOT
BTU	BRITISH THERMAL UNIT	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SQ. FT.	SQUARE FEET
CFM	CUBIC FEET PER MINUTE	HR	HOUR	STL.	STEEL
C.L.	CENTER LINE	JAN	JANITOR	STOR.	STORAGE
CLEAN'G	CLEANING	KVA	KILO-VOLT-AMPERES	TEMP.	TEMPERATURE
CLG	CEILING	MAT.	MATERIAL	TYP.	TYPICAL
CONC.	CONCRETE	MAX.	MAXIMUM	V	VOLT
CONT.	CONTINUOUS	MBH	THOUSAND BTU PER HOUR	VENT.	VENTILATION
CORR.	CORRIDOR	MECH.	MECHANICAL	W/	WITH
DB	DRY BULB	MIL.	MILITARY	WB	WET BULB
DEF.	DEFINITIVE	MIN.	MINIMUM		
DET.	DETAIL	N/A	NOT APPLICABLE		
DIA.	DIAMETER	N.I.C.	NOT IN CONTRACT		
D.O.D.	DEPARTMENT OF DEFENSE	NO.	NUMBER		
E.W.C.	ELECTRIC WATER COOLER	O.C.	ON CENTER		
EXCL.	EXCLUDING	O.C.E.	OFFICE OF THE CHIEF OF ENGINEERS		
F	FARENHEIT	OPP.	OPPOSITE		
FIN.	FINISH				
FL.	FLOOR				



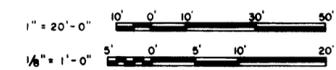
SECTION A-A

SCALE: 1/8" = 1'-0"



FLOOR PLAN

SCALE: 1/8" = 1'-0"



SYMBOL		DESCRIPTION	DATE	APPROVAL
▲	ANCHOR RINGS ADDED		3-12-75	

REVISIONS	

CHAPMAN & MILLER, ARCHITECTS 1840 WISCONSIN AVENUE, N.W. WASHINGTON, D.C. 20007	DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS MILITARY CONSTRUCTION ENGINEERING DIVISION WASHINGTON, D.C.
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DRAWN BY: L.S.	CONSOLIDATED ARMS STORAGE BUILDING
TRACED BY: _____	
CHECKED BY: K.L.	
SUBMITTED BY: _____	
APPROVED: _____	

APPROVED: _____	DATE: _____
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CHIEF OF BRANCH: _____	CHIEF ENGINEERING DIVISION MIL. CONST. O.C.E.
APPROVED FOR THE PLAN: _____	SCALE: AS SHOWN SPEC NO. N/A
DATE: 4 MAY 74	DEF 33-33-18
	SHEET 1 OF 2