

STORAGE IN APPROVED MAGAZINES OF AIM-9 SERIES MISSILE (SIDEWINDER), PACKED 4 PER CNU-310/E, CNU-323/E AND CNU-324/E METAL CONTAINER

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U. S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>NLH</i> <i>David A. Pashoville</i> SMCAR-ESK	DRAFTSMAN	D. WHITMORE	
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	LOGISTICS ENGINEERING OFFICE	<i>William Ernst</i>	
MARCH 1982			
	CLASS	DIVISION	DRAWING
	REVISION NO. 2	DECEMBER 1994	
SEE THE REVISION LISTING ON PAGE 2			
	19	48	7059/3B
			FILE SP1-3-4- 14-22J11

DO NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE STORAGE PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO THE AIM-9 SERIES MISSILE (SIDEWINDER) PACKED FOUR (4) PER CNU-310/E, CNU-323/E, AND CNU-324/E, METAL SHIPPING AND STORAGE CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CNU-310/E, CNU-323/E AND CNU-324/E CONTAINER WITH CONTENTS.
- C. FOR DETAILS OF THE CNU-310/E, CNU-323/E AND CNU-324/E SHIPPING AND STORAGE CONTAINER, SEE THE "CONTAINER DETAIL" ON PAGE 3.
- CONTAINER DIMENSIONS - - - 138-1/4" LONG BY 42" WIDE BY
17-3/4" HIGH.
GROSS WEIGHT - - - - - 1,400 LBS (APPROX).
CUBE - - - - - 60 CUBIC FEET.
- D. CAUTION: THIS ITEM IS IN A "PROPULSIVE STATE" AND MUST BE STORED WITH THE FORWARD END FACING TOWARD A SIDE WALL AND/OR THE REAR WALL AS INDICATED BY THE DIRECTIONAL ARROWS ON THE STORAGE VIEWS. ADDITIONALLY, CONTAINERS MUST NOT BE STACKED MORE THAN ELEVEN (11) CONTAINERS HIGH.
- E. THE STORAGE PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR STORAGE IN VARIOUS TYPES AND SIZES OF MAGAZINES. THE STORAGE PROCEDURES DEPICTED FOR THE SPECIFIC TYPES OF MAGAZINES MAY ALSO BE UTILIZED TO STORE CONTAINERS IN OTHER TYPES OF APPROVED MAGAZINES. MINOR ADJUSTMENTS MAY BE MADE TO FACILITATE STORAGE IN OTHER TYPES OF MAGAZINES, HOWEVER, THE BASIC PRINCIPLES AS DEPICTED HEREIN WILL BE FOLLOWED.
- F. AISLE DIMENSIONS AS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT (MHE), HOWEVER, AN 18" MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE AFT END OF THE CONTAINER WHERE THE HUMIDITY INDICATOR IS LOCATED.
- G. CAUTION: THE ALLOWABLE "EXPLOSIVE LIMIT" ESTABLISHED FOR A MAGAZINE IS NOT TO BE EXCEEDED. THIS LIMITATION MAY REQUIRE A QUANTITY REDUCTION FROM THE STORAGE AS SHOWN.
- H. IN IGLOO, ARCH TYPE AND STRADLEY MAGAZINES WHICH HAVE SLOPING FLOORS, THE DEPICTED STORAGE PATTERNS INCLUDE CONTAINER-STACKS WHICH STRADDLE THE RIDGE OF THE FLOOR AT THE CENTER OF THE MAGAZINE. IT WILL BE NECESSARY, THEREFORE, TO USE 2" X 6" X 42" FLOOR DUNNAGE UNDER THESE STACKS TO PREVENT THE BOTTOM OF THE CONTAINER SKIDS FROM CONTACTING THE CONCRETE FLOOR. STACK-STABILIZING DUNNAGE IN THE FORM OF SHIMS WILL BE USED IF REQUIRED TO ACHIEVE SOUND AND ACCEPTABLE STABLE STACKS. SHIM MATERIAL OF VARYING THICKNESS WILL BE USED AS REQUIRED UNDER THE LOAD BEARING LOCATIONS AT THE ENDS OF FIRST-LAYER CONTAINERS. UNDER STACKS THAT DO NOT STRADDLE THE RIDGE OF THE FLOOR, THE USE OF "FLOOR DUNNAGE" IS OPTIONAL, ALTHOUGH THE USE OF THIS TYPE OF DUNNAGE IS DELINEATED WITHIN THIS STORAGE PROCEDURE DRAWING. THE PURPOSE OF FLOOR DUNNAGE IS TO KEEP THE SKIDS OF A CONTAINER DRY, THUS AIDING IN PREVENTING DETERIORATION DUE TO CORROSION. THEREFORE, FLOOR DUNNAGE SHOULD BE USED WHEN STORING IN A MAGAZINE THAT IS KNOWN TO HAVE A "DAMP" FLOOR. ALSO, IN LIEU OF USING ONE-INCH THICK FLOOR DUNNAGE AS SPECIFIED, THE USE OF THICKER FLOOR DUNNAGE MAY BE REQUIRED, AND SHOULD BE USED, TO ACHIEVE THE DESIRED OBJECTIVE. NOTE: ISOMETRIC VIEWS WITHIN THIS DRAWING DO NOT DEPICT ALL FLOOR DUNNAGE THAT IS REQUIRED WHEN DUNNAGE IS USED. FLOOR DUNNAGE IS SHOWN AT SOME LOCATIONS TO PROVIDE POSITIONING GUIDANCE. SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 FOR A TYPICAL INSTALLATION.
- J. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE FRONTAL AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- K. STORED CONTAINERS MUST NOT CONTACT THE WALLS OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, CONTAINERS MAY BE ELIMINATED FROM THE DEPICTED STORAGE PATTERN AS NECESSARY.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER - - -: FED SPEC MM-L-751; DUNNAGE LUMBER, SEE TM 743-200-1.

(GENERAL NOTES CONTINUED)

- L. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- M. THE HEIGHT OF THE PACKAGE GUARD ON SOME FORKLIFT TRUCKS MAY NOT PERMIT PLACEMENT OF SOME TOP LAYER CONTAINERS IN THE STACKS SHOWN IN THE STORAGE VIEWS HEREIN, UNLESS TWO UPPER CONTAINERS ARE HANDLED AS ONE LIFT OR THE PACKAGE GUARD IS REMOVED (TINE CARRIAGE WILL IN MOST INSTANCES PROVIDE ADEQUATE PACKAGE GUARD PROTECTION). ONLY A FORKLIFT TRUCK OF ADEQUATE CAPACITY WILL BE USED WHEN LIFTING TWO CONTAINERS AS ONE LIFT.
- N. ANY CONTAINER THAT DOES NOT CONTAIN (4) ROUNDS WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ON THE TOP OF OR IN FRONT OF THE LAST STACK ADJACENT TO OR NEAREST THE MAGAZINE DOOR.
- O. IF THE QUANTITY OF CONTAINERS FOR A MAGAZINE IS TO BE REDUCED FROM WHAT IS SHOWN HEREIN - DUE TO THE PERMITTED "EXPLOSIVE LIMIT" OR FOR ANY OTHER REASON, SUCH AS A LIMITED QUANTITY TO BE STORED - THE DELINEATED PROCEDURES ARE TO BE ADJUSTED BY OMITTING STACKS RATHER THAN BY OMITTING LAYERS.
- P. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- Q. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- R. CONTAINERS PRESENTLY STORED IN ACCORDANCE WITH A PRIOR APPROVED DRAWING NEED NOT BE RE-STORED SOLELY TO CONFORM TO THE PROCEDURES SPECIFIED IN THIS DOCUMENT.

REVISIONS

REVISION NO. 1, DATED JULY 1985, CONSISTS OF:

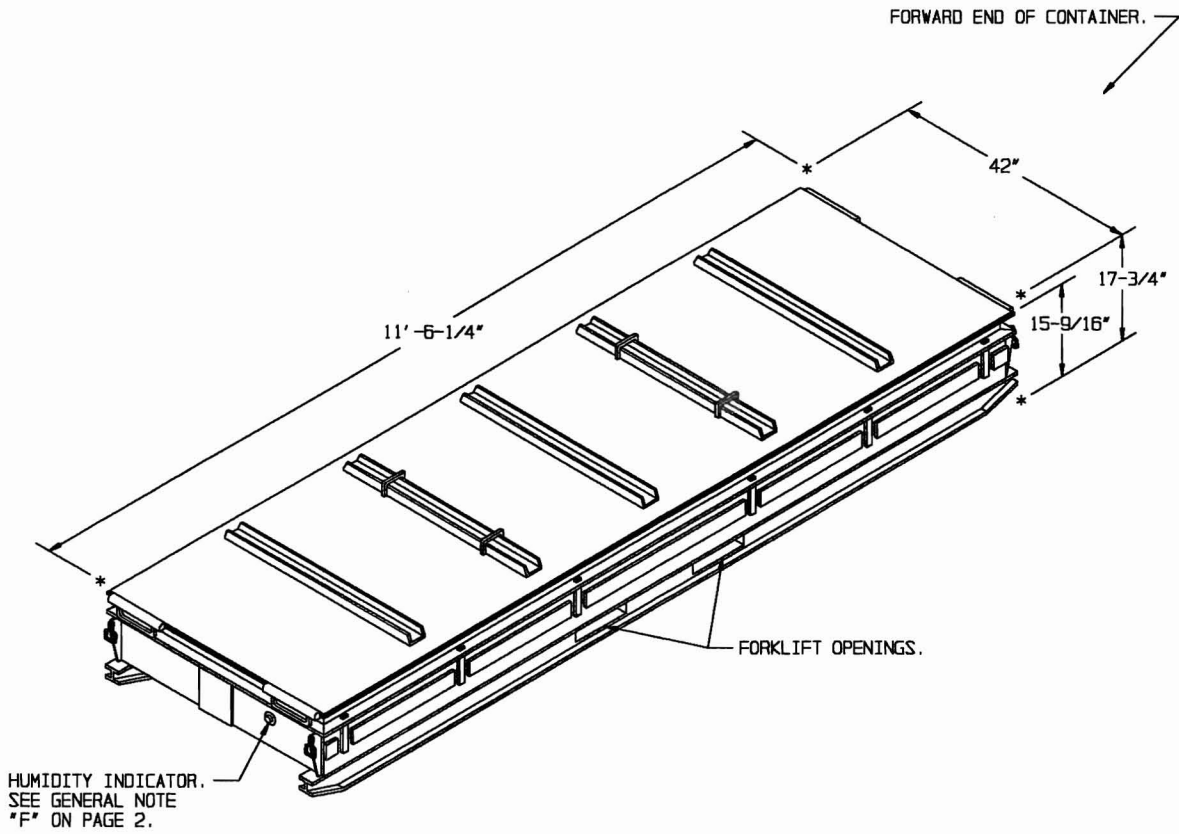
1. UPDATING COVER PAGE.
2. ADDING AN 11-HIGH STACKING RESTRICTION TO GENERAL NOTE D.

REVISION NO. 2, DATED DECEMBER 1994, CONSISTS OF:

1. UPDATING DRAWING FORMAT TO COMPLY WITH CURRENT STANDARDS.
2. UPDATING AND REVISING THE GENERAL NOTES AS REQUIRED.

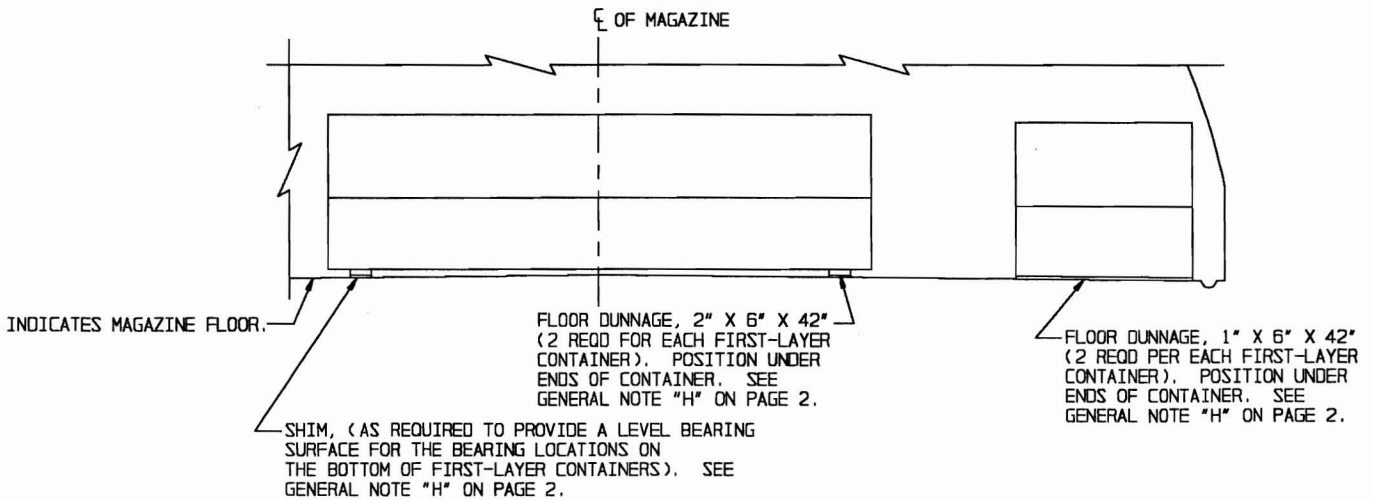
APPLICABLE U.S. AIR FORCE CONTAINER DRAWINGS:

CNU-310/E DWG. NO. 785041-10
 CNU-323/E DWG. NO. 785041-30
 CNU-324/E DWG. NO. 785041-50



CONTAINER DETAIL

NOTE: THE CNU-310/E CONTAINER IS SHOWN ABOVE. THE CNU-323/E AND CNU-324/E CONTAINERS ARE EXTERNALLY IDENTICAL TO THE CNU-310/E CONTAINER. SEE GENERAL NOTES "B", "C", AND "D" ON PAGE 2.



FLOOR DUNNAGE AND SHIM LOCATION DETAIL

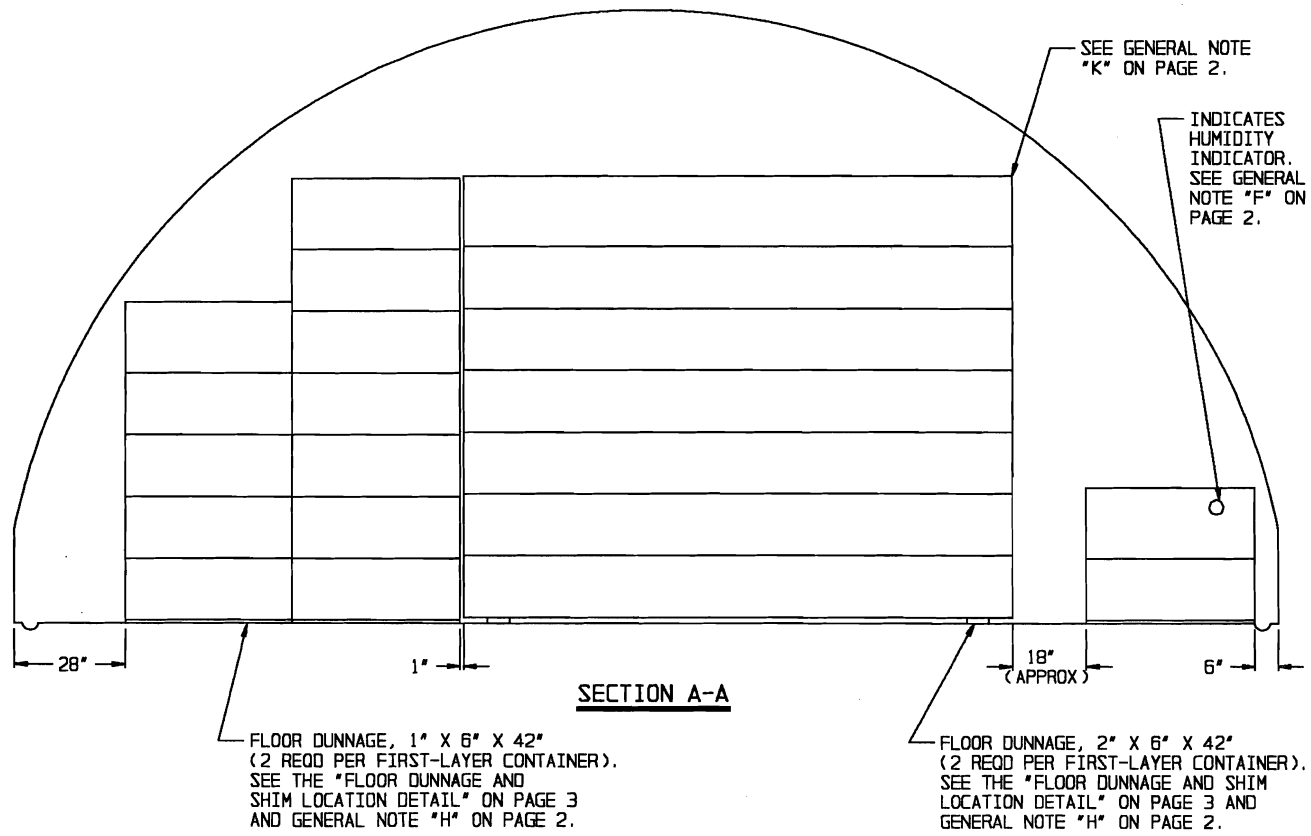
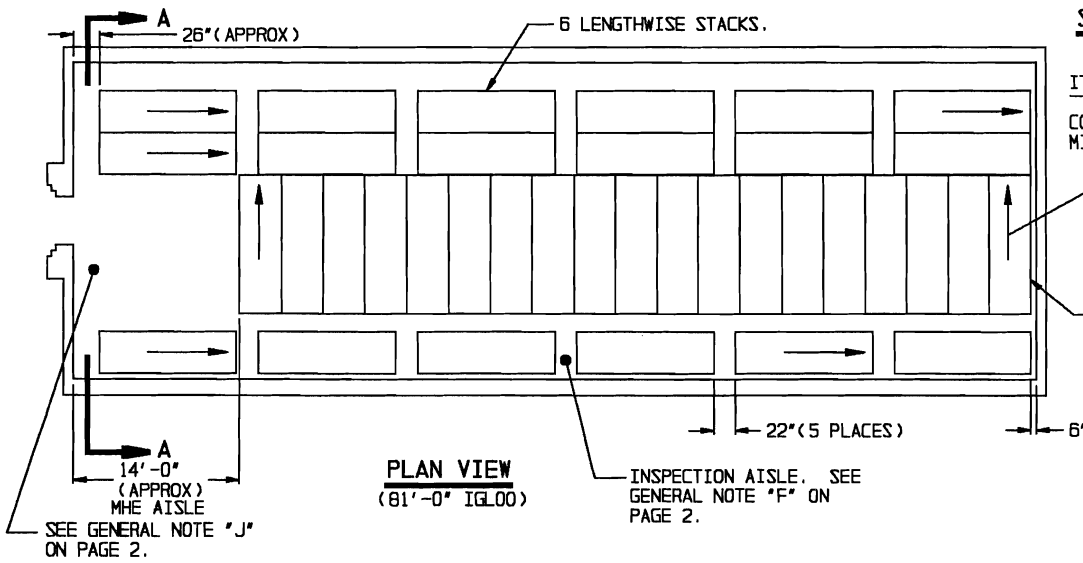
DETAILS

STORAGE IN 81'-0" IGLOO
(12'-9" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	217
MISSILE - - - - -	868

ARROWS INDICATE FORWARD END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.

19 CROSSWISE STACKS.



STORAGE IN 60'-8" IGLOO
(12'-9" HIGH)

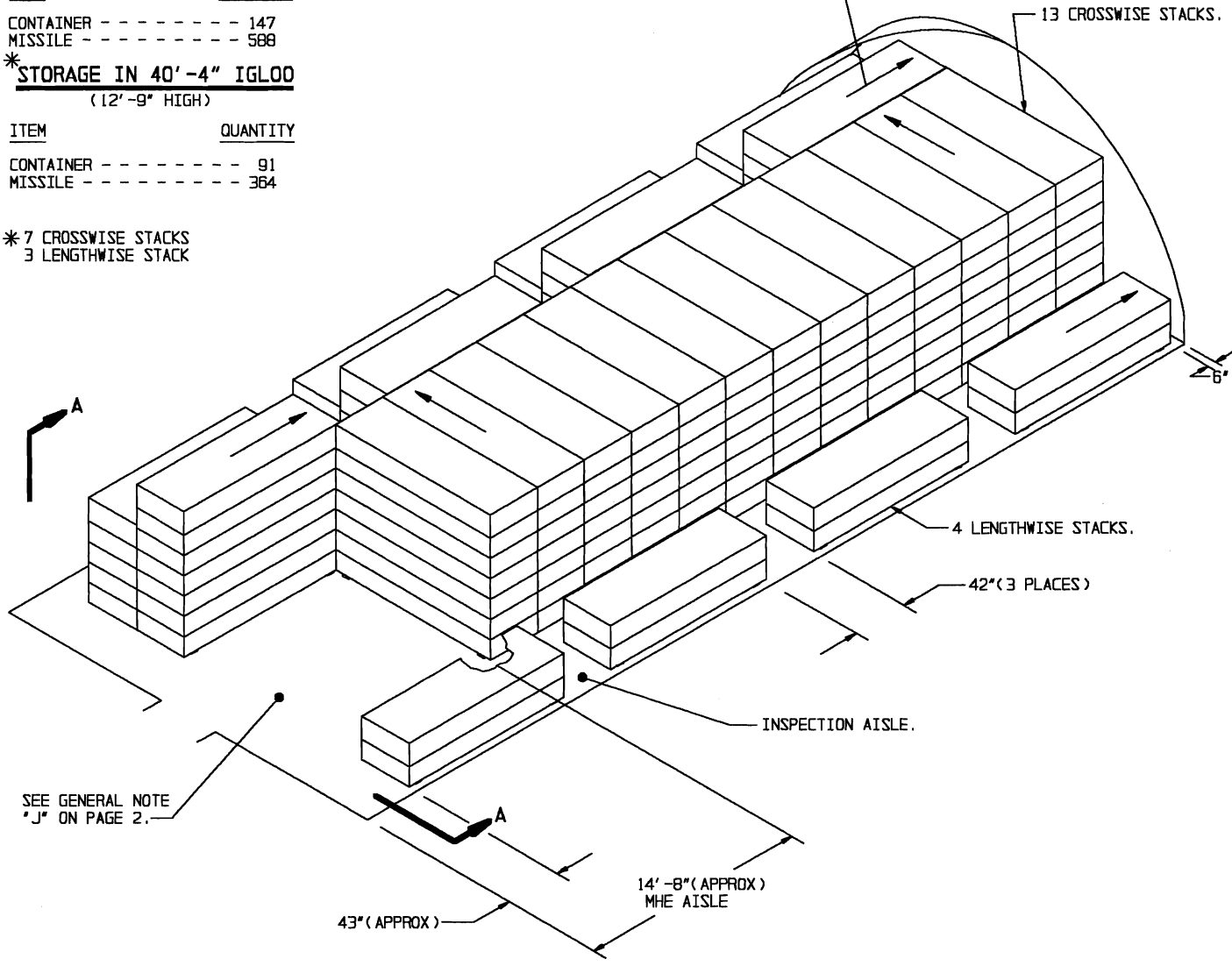
ITEM	QUANTITY
CONTAINER - - - - -	147
MISSILE - - - - -	588

***STORAGE IN 40'-4" IGLOO**
(12'-9" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	91
MISSILE - - - - -	364

* 7 CROSSWISE STACKS
3 LENGTHWISE STACK

ARROWS INDICATE FORWARD END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



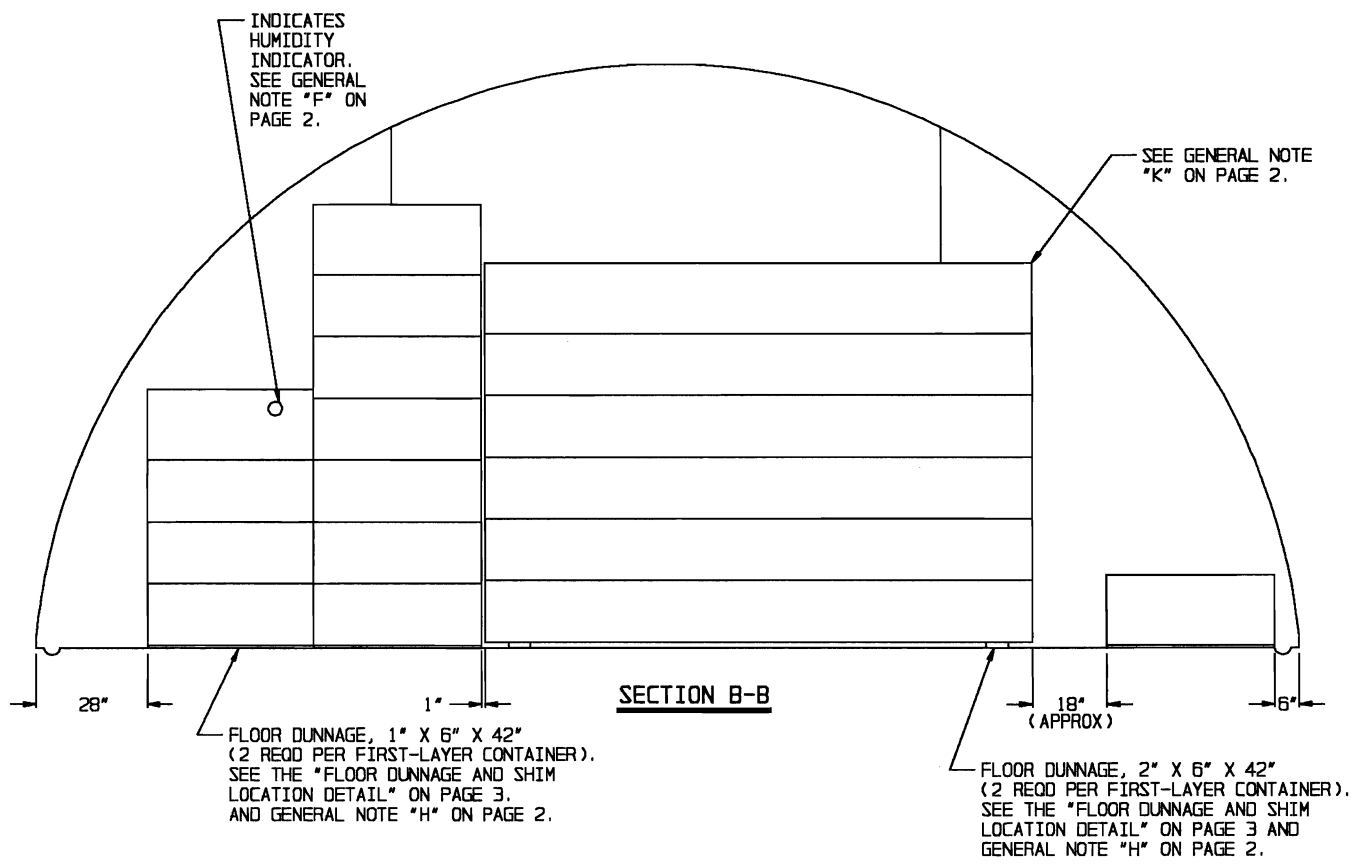
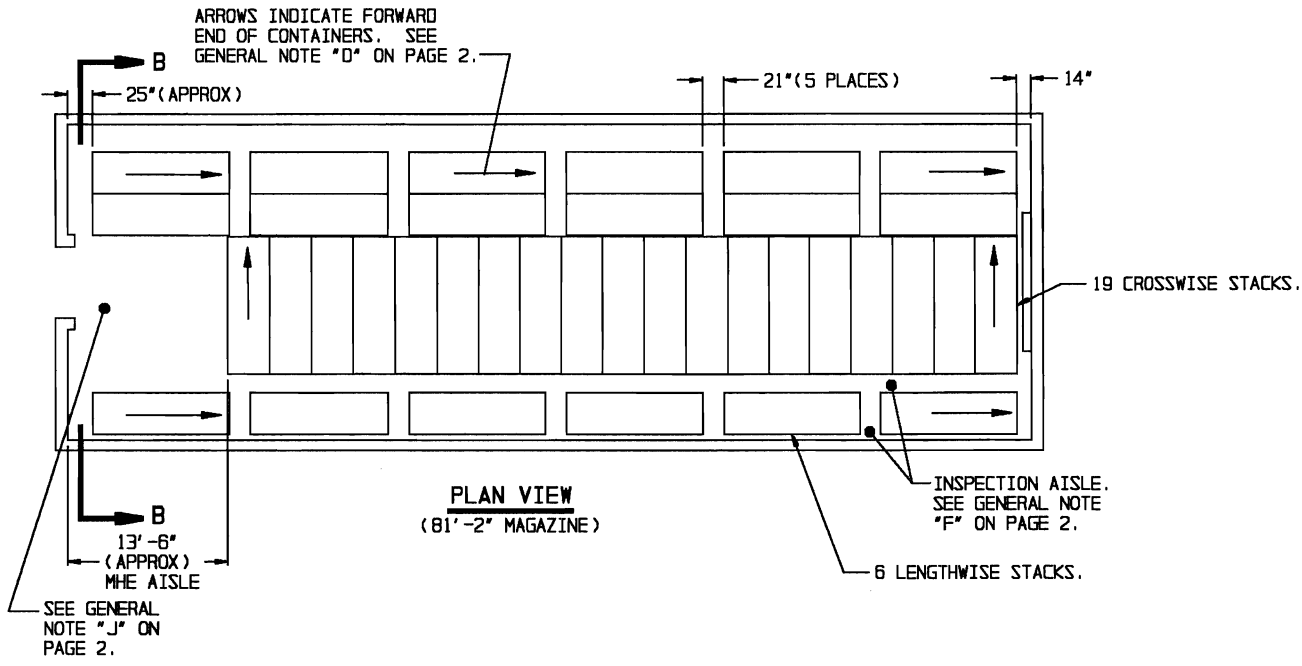
SEE GENERAL NOTE "J" ON PAGE 2.

ISOMETRIC VIEW
(60'-8" IGLOO)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

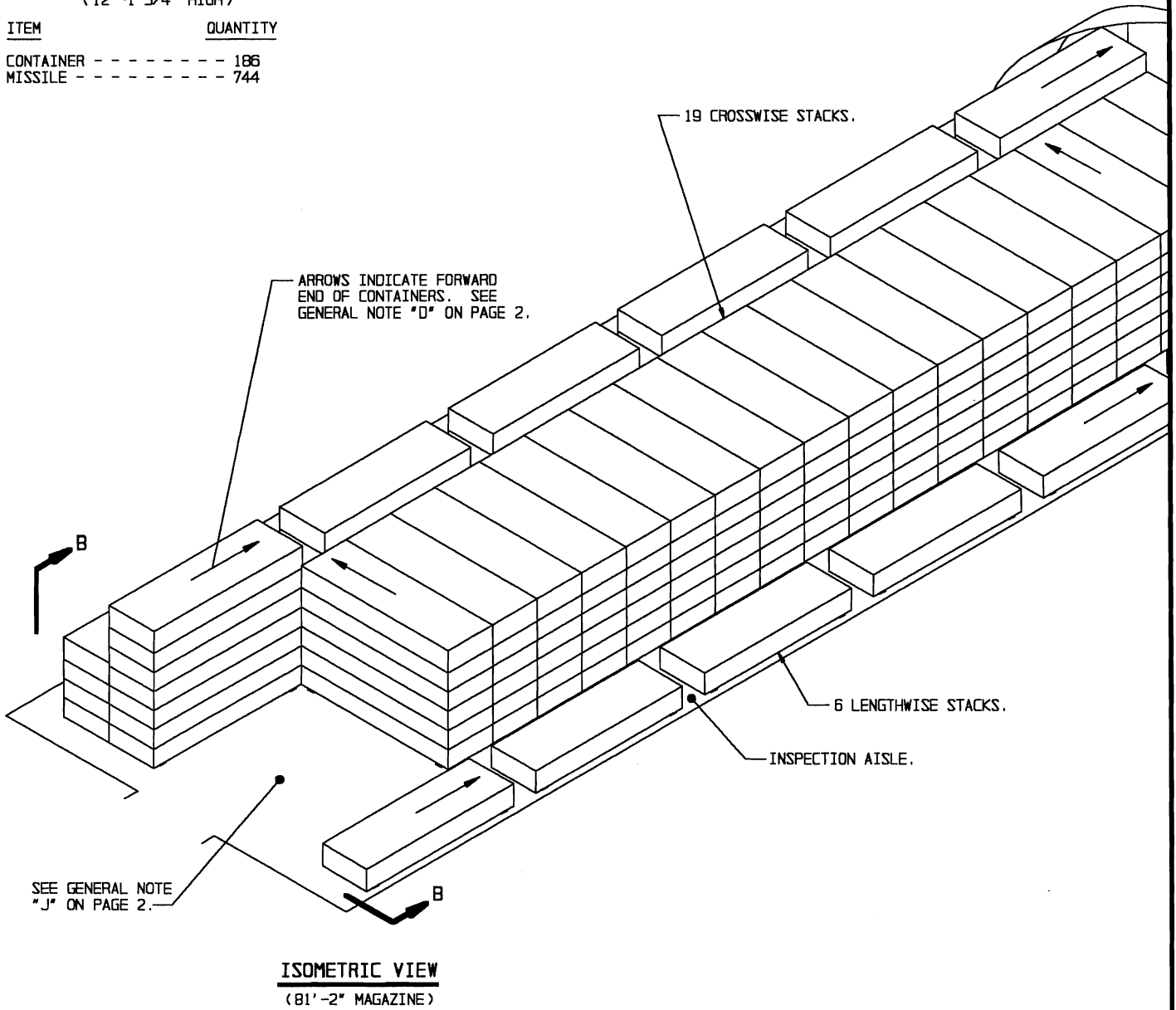
* SEE GENERAL NOTE "H" ON PAGE 2.



STORAGE IN 81'-2" MAGAZINE

(12'-1-3/4" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	186
MISSILE - - - - -	744



FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

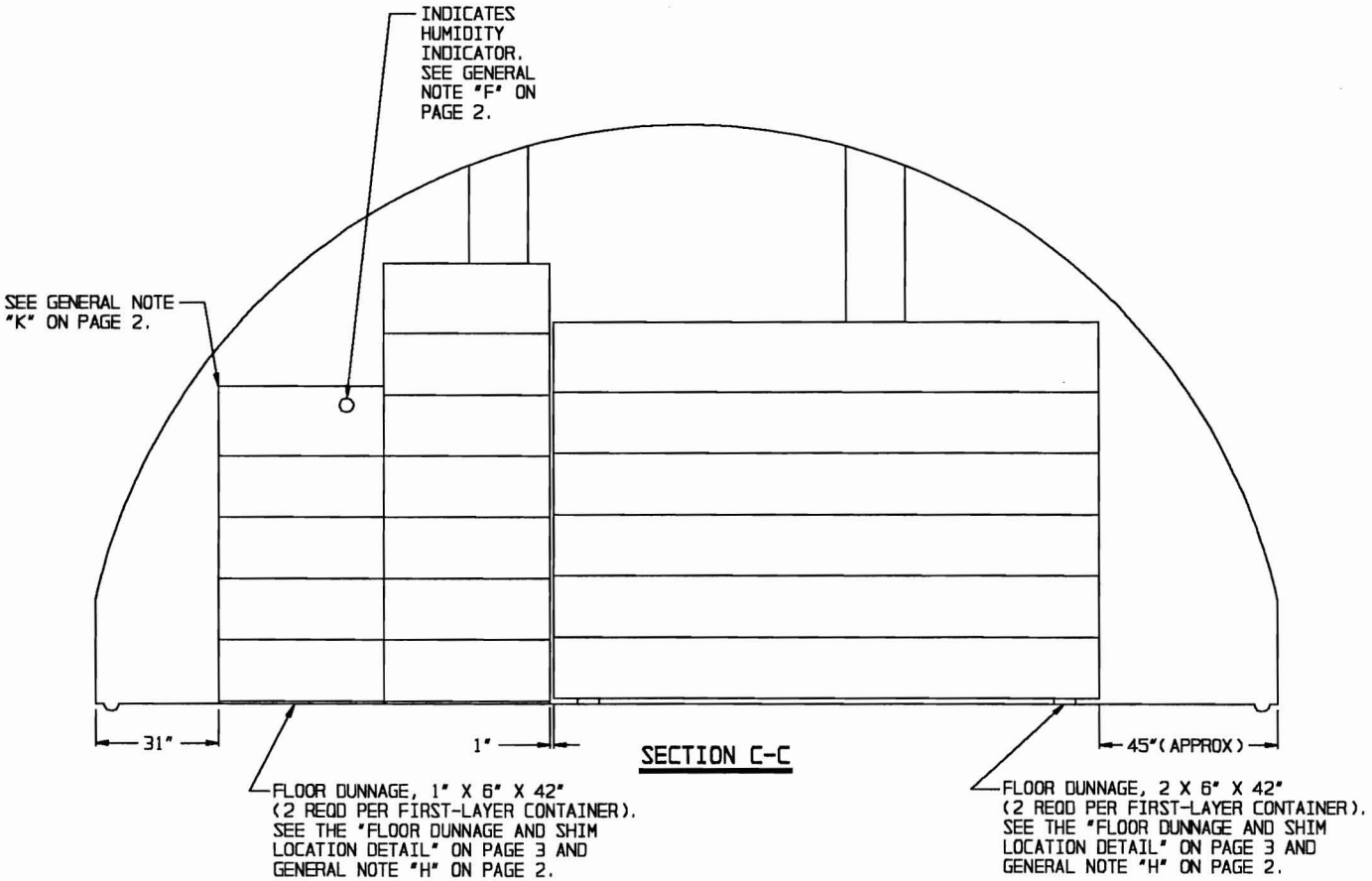
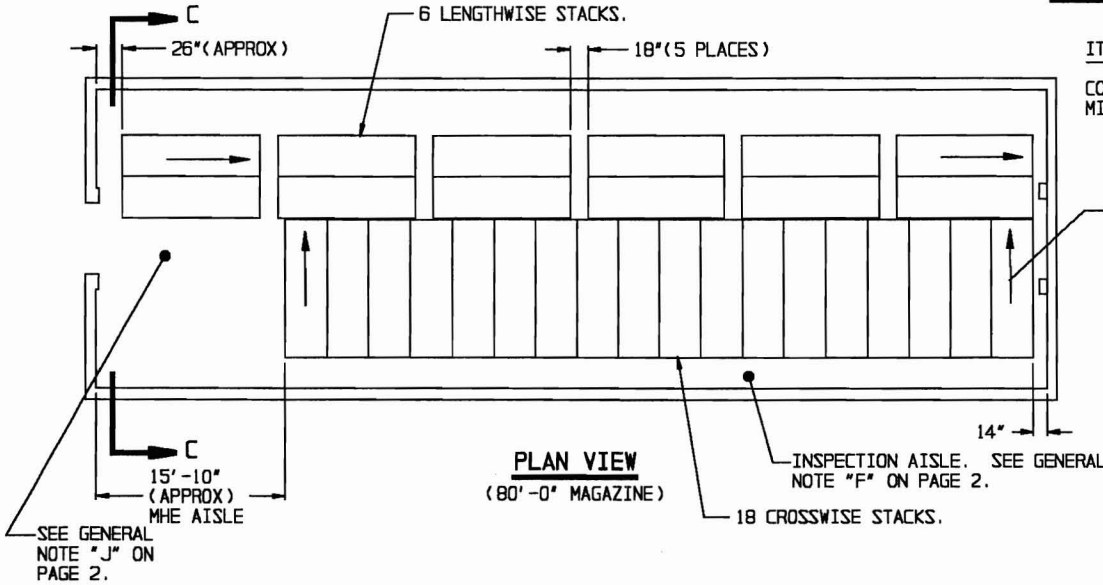
BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

* SEE GENERAL NOTE "H" ON PAGE 2.

STORAGE IN 80'-0" MAGAZINE

(12'-1-3/4" HIGH)

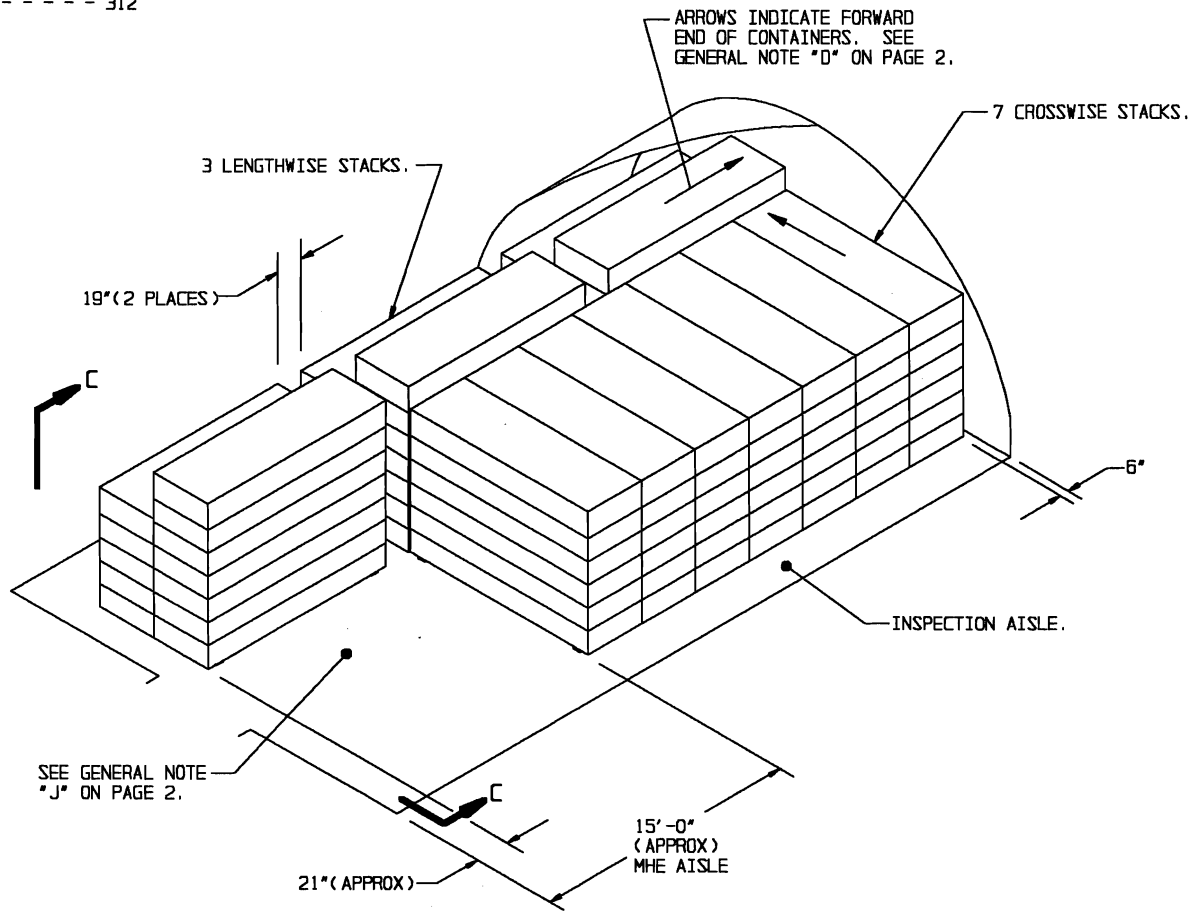
ITEM	QUANTITY
CONTAINER - - - - -	180
MISSILE - - - - -	720



STORAGE IN 40'-0" MAGAZINE

(12'-1-3/4" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	78
MISSILE - - - - -	312



ISOMETRIC VIEW
(40'-0" MAGAZINE)

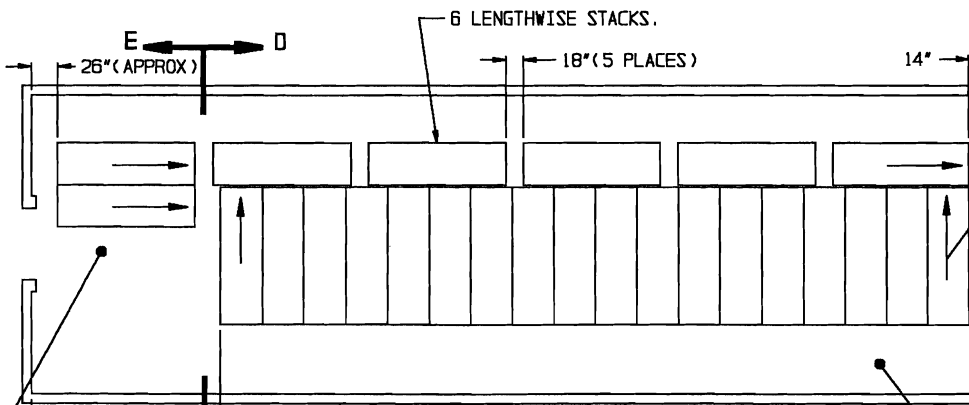
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

* SEE GENERAL NOTE "H" ON PAGE 2.

STORAGE IN 80'-0" MAGAZINE

(11'-0" HIGH)



ITEM	QUANTITY
CONTAINER	144
MISSILE	576

ARROWS INDICATE FORWARD END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.

18 CROSSWISE STACKS.

INSPECTION AISLE. SEE GENERAL NOTE "F" ON PAGE 2.

PLAN VIEW

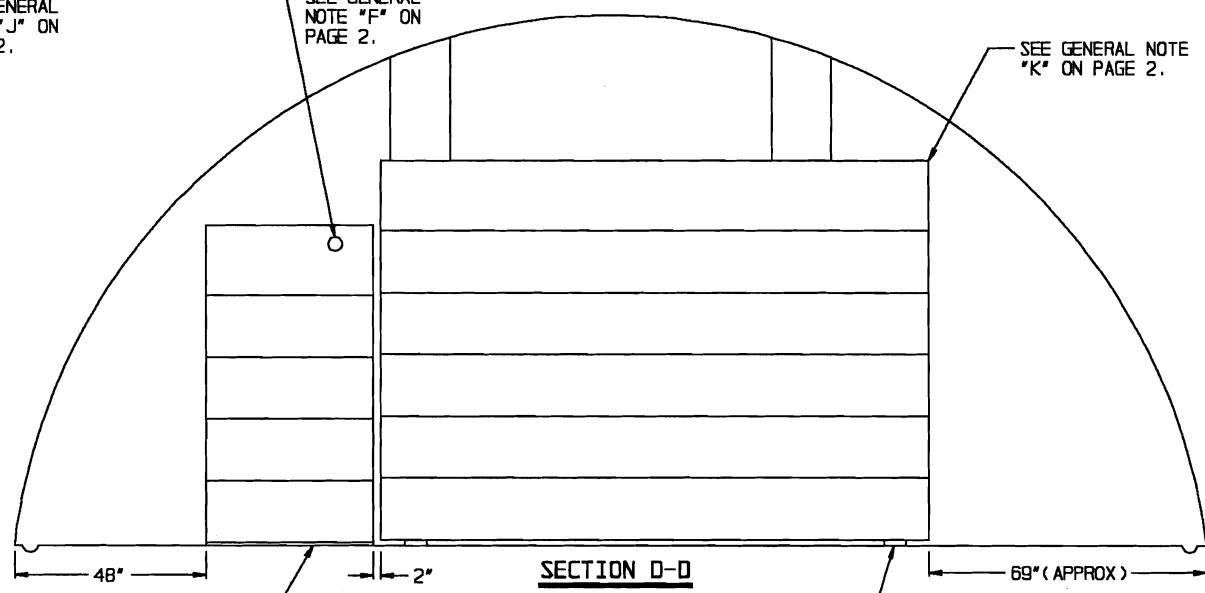
(80'-0" MAGAZINE)

INDICATES HUMIDITY INDICATOR. SEE GENERAL NOTE "F" ON PAGE 2.

SEE GENERAL NOTE "J" ON PAGE 2.

15'-10" (APPROX) MHE AISLE

SEE GENERAL NOTE "K" ON PAGE 2.

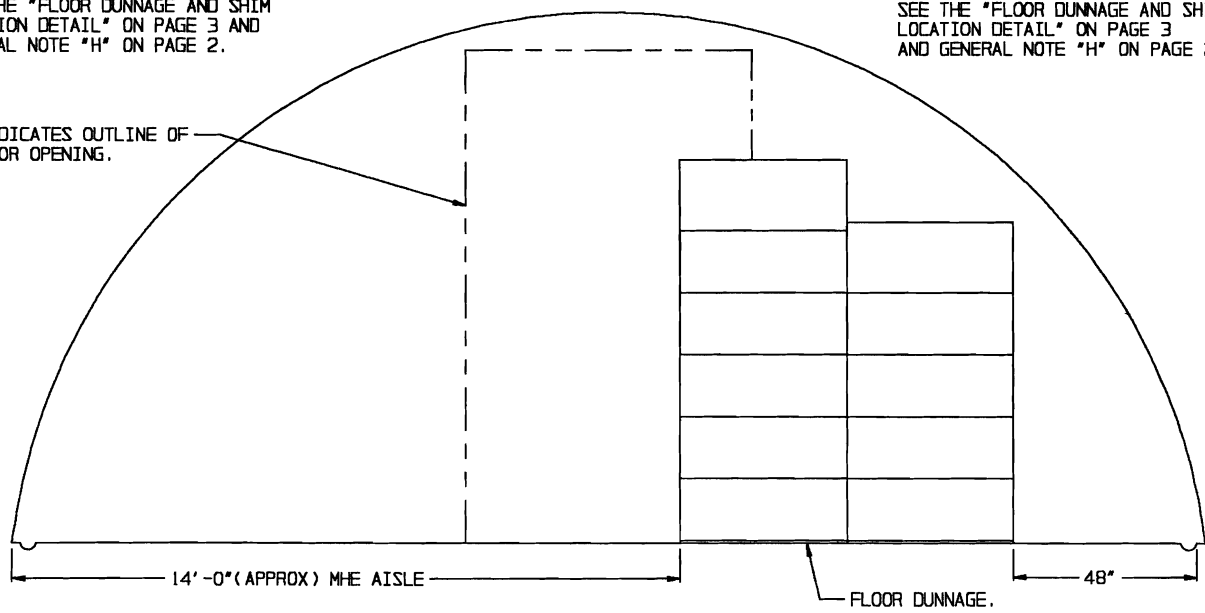


SECTION D-D

FLOOR DUNNAGE, 1" X 6" X 42" (2 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 AND GENERAL NOTE "H" ON PAGE 2.

FLOOR DUNNAGE, 2" X 6" X 42" (2 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 AND GENERAL NOTE "H" ON PAGE 2.

INDICATES OUTLINE OF DOOR OPENING.

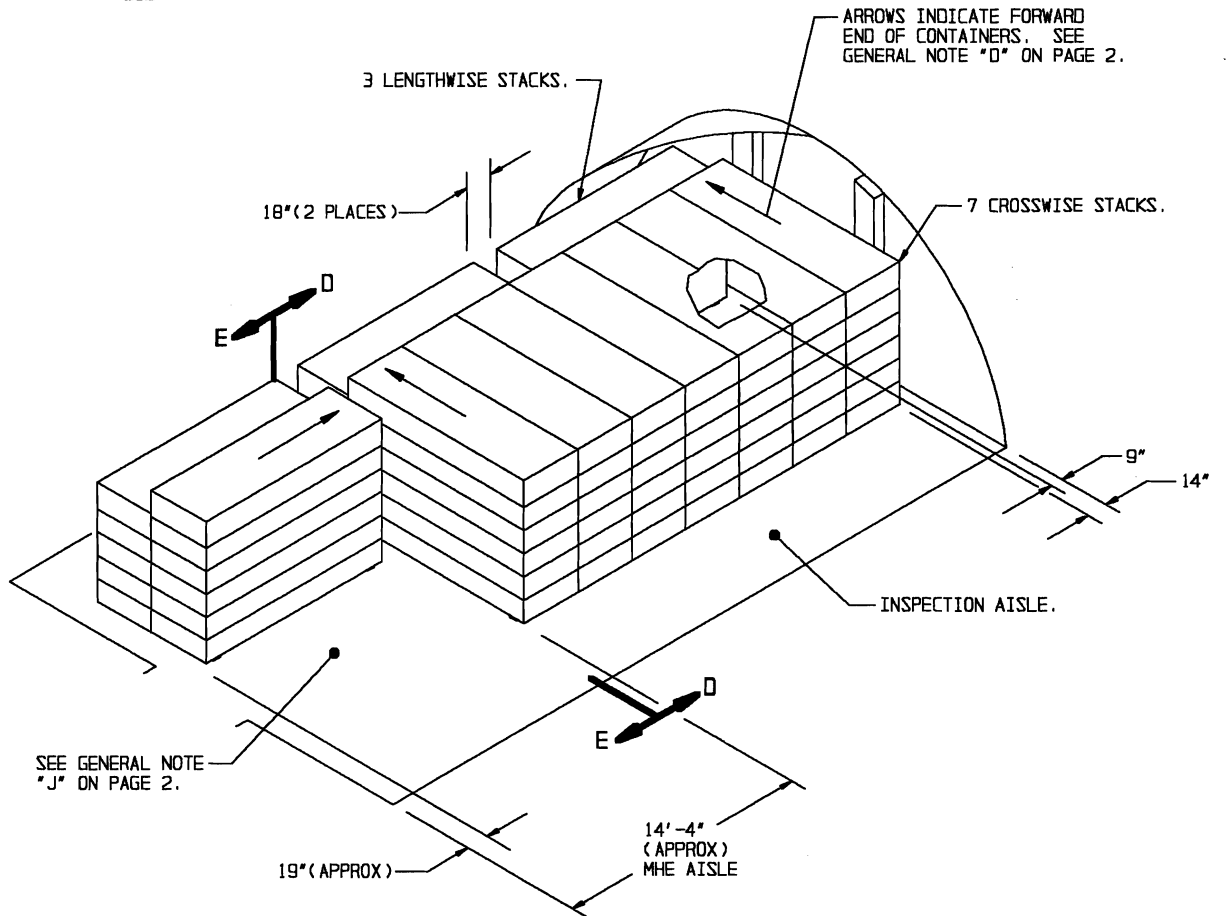


SECTION E-E

STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	63
MISSILE - - - - -	252



ISOMETRIC VIEW
(40'-0" MAGAZINE)

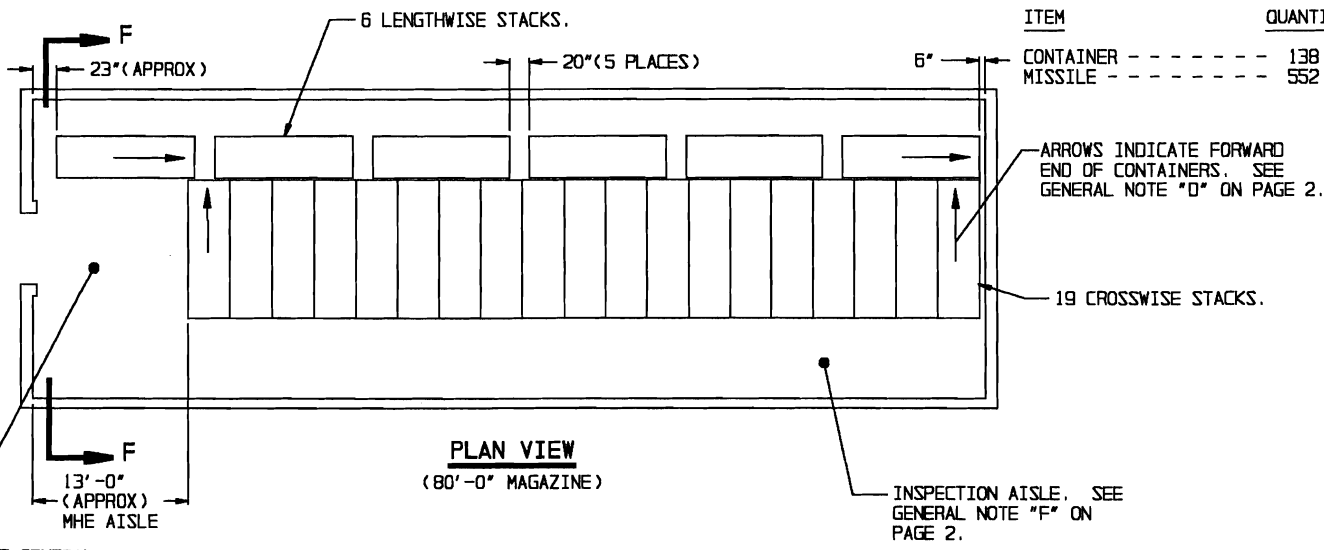
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

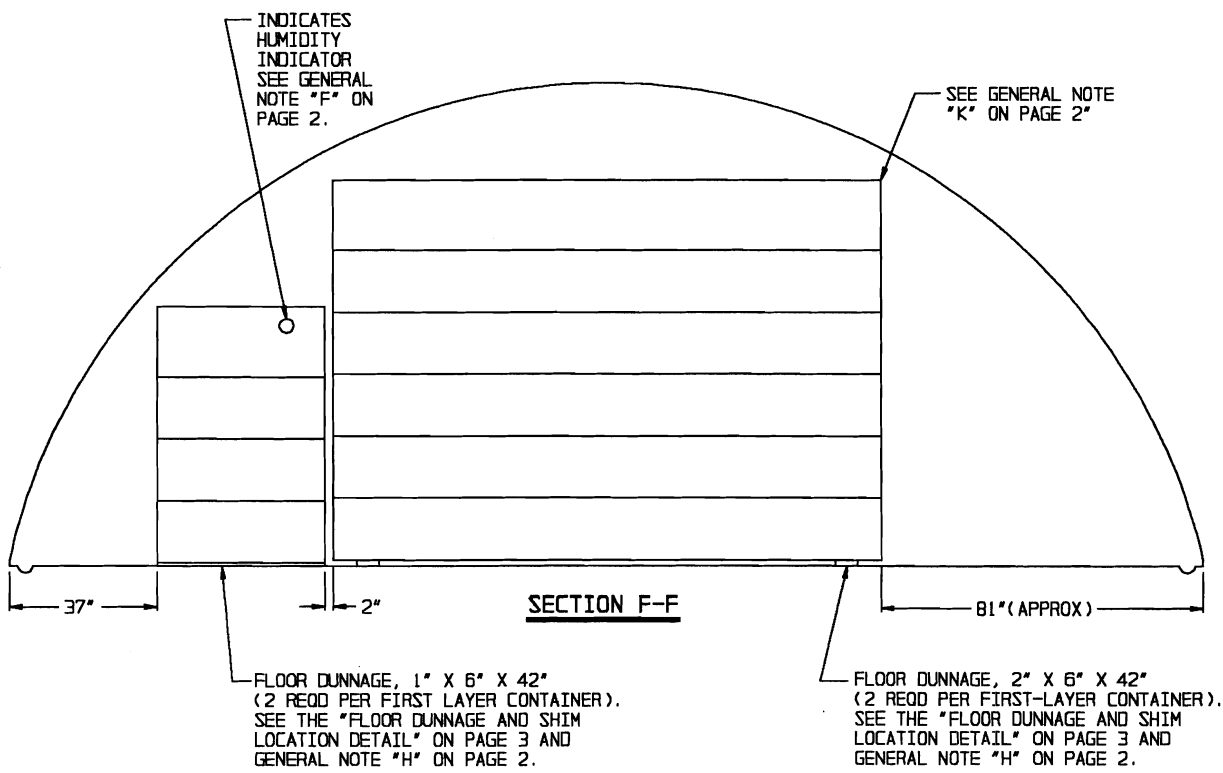
* SEE GENERAL NOTE "H" ON PAGE 2.

STORAGE IN 80'-0" MAGAZINE
(10'-0" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	138
MISSILE - - - - -	552

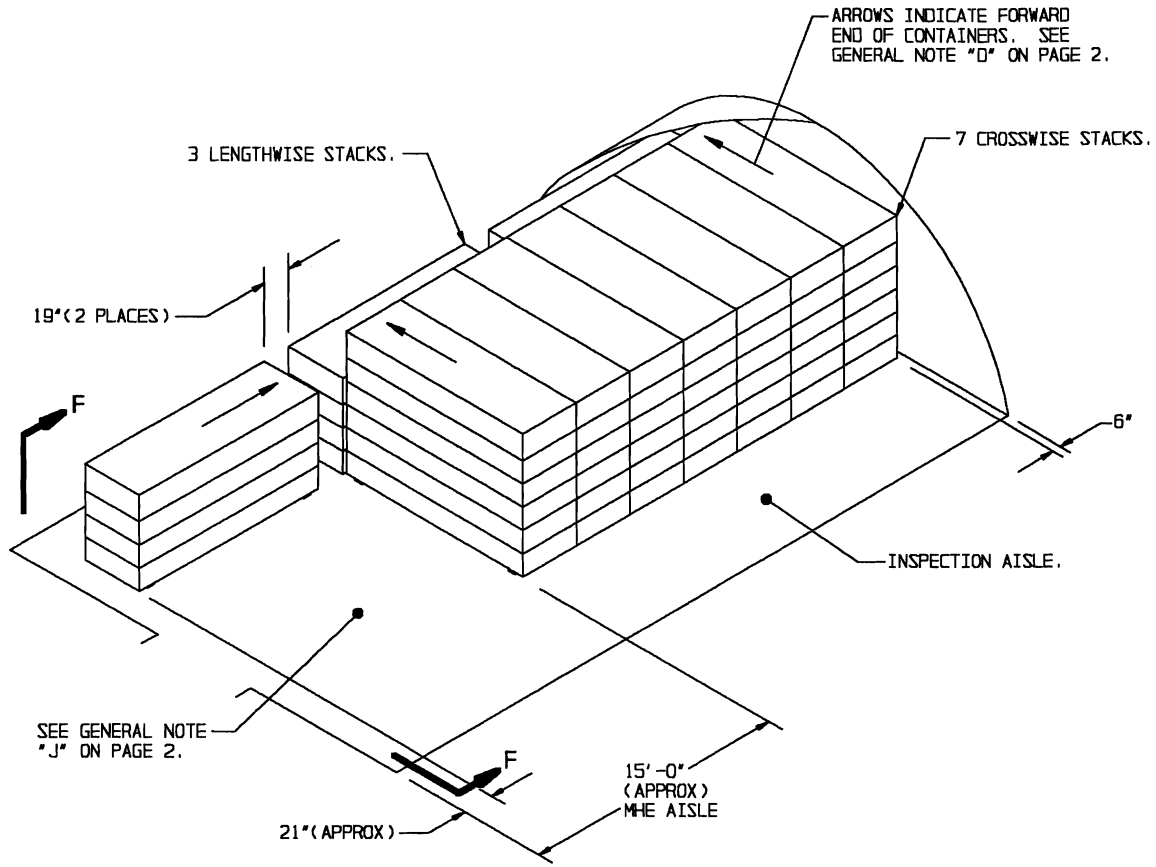


SEE GENERAL NOTE "J" ON PAGE 2.



STORAGE IN 40'-0" MAGAZINE
(10'-0" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	54
MISSILE - - - - -	216

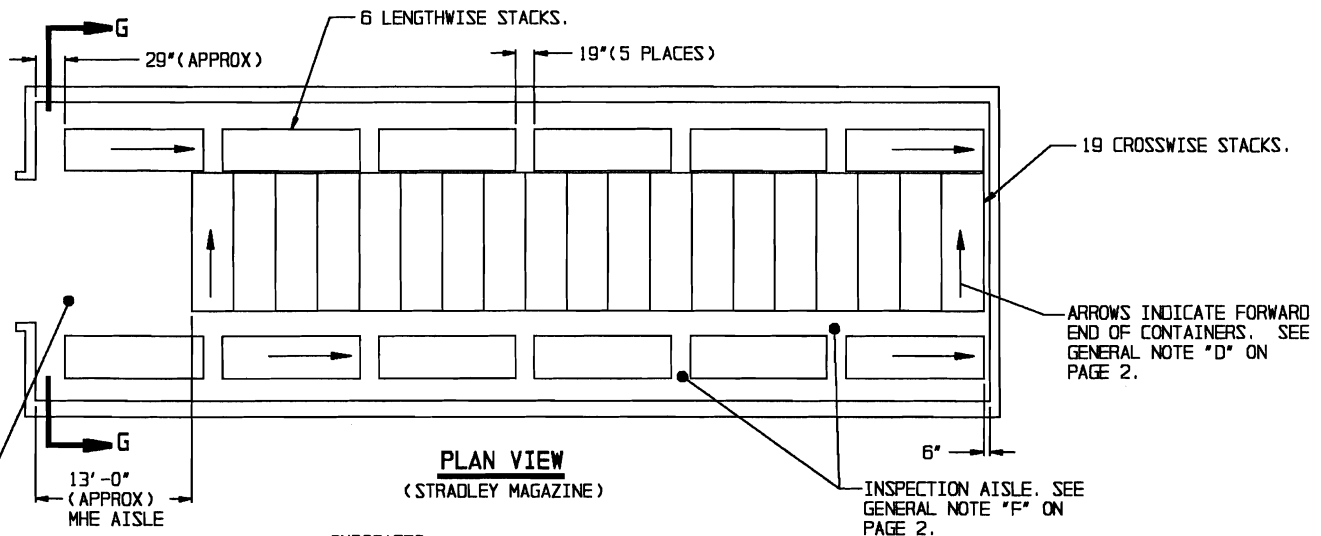


ISOMETRIC VIEW
(40'-0" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

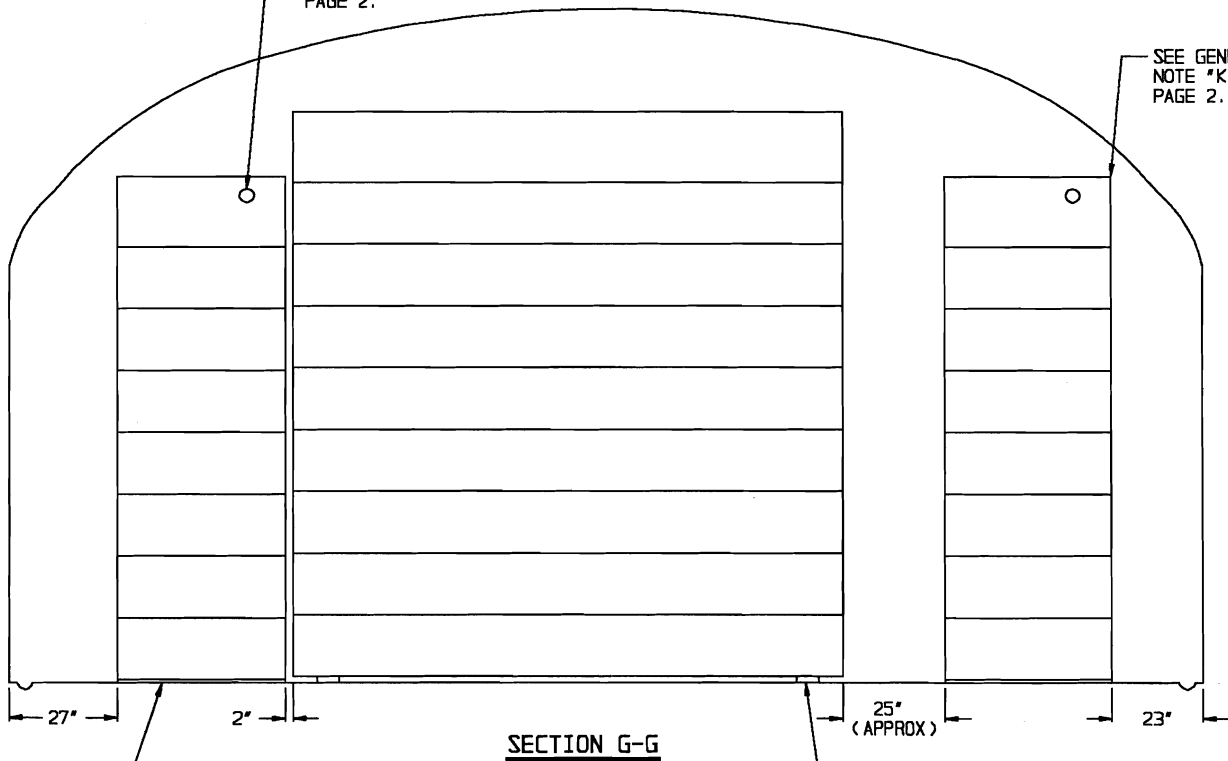
* SEE GENERAL NOTE "H" ON PAGE 2.



SEE GENERAL NOTE "J" ON PAGE 2.

INDICATES HUMIDITY INDICATOR SEE GENERAL NOTE "F" ON PAGE 2.

SEE GENERAL NOTE "K" ON PAGE 2.



FLOOR DUNNAGE, 1" X 6" X 42"
(2 REQD PER FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 AND GENERAL NOTE "H" ON PAGE 2.

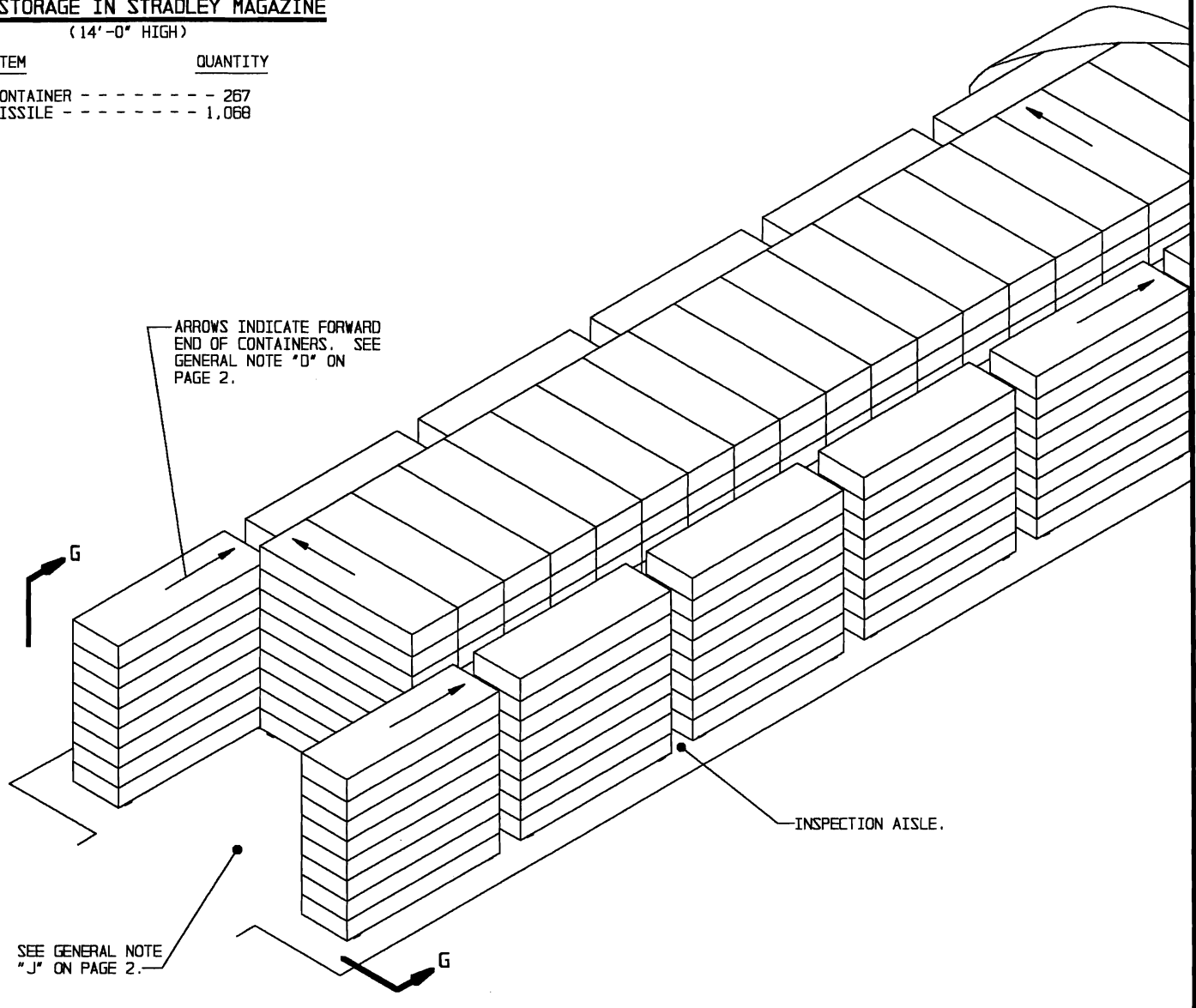
FLOOR DUNNAGE, 2" X 6" X 42"
(2 REQD PER FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 AND GENERAL NOTE "H" ON PAGE 2.

STORAGE IN STRADLEY MAGAZINE

(14'-0" HIGH)

ITEM QUANTITY

CONTAINER - - - - - 267
 MISSILE - - - - - 1,068

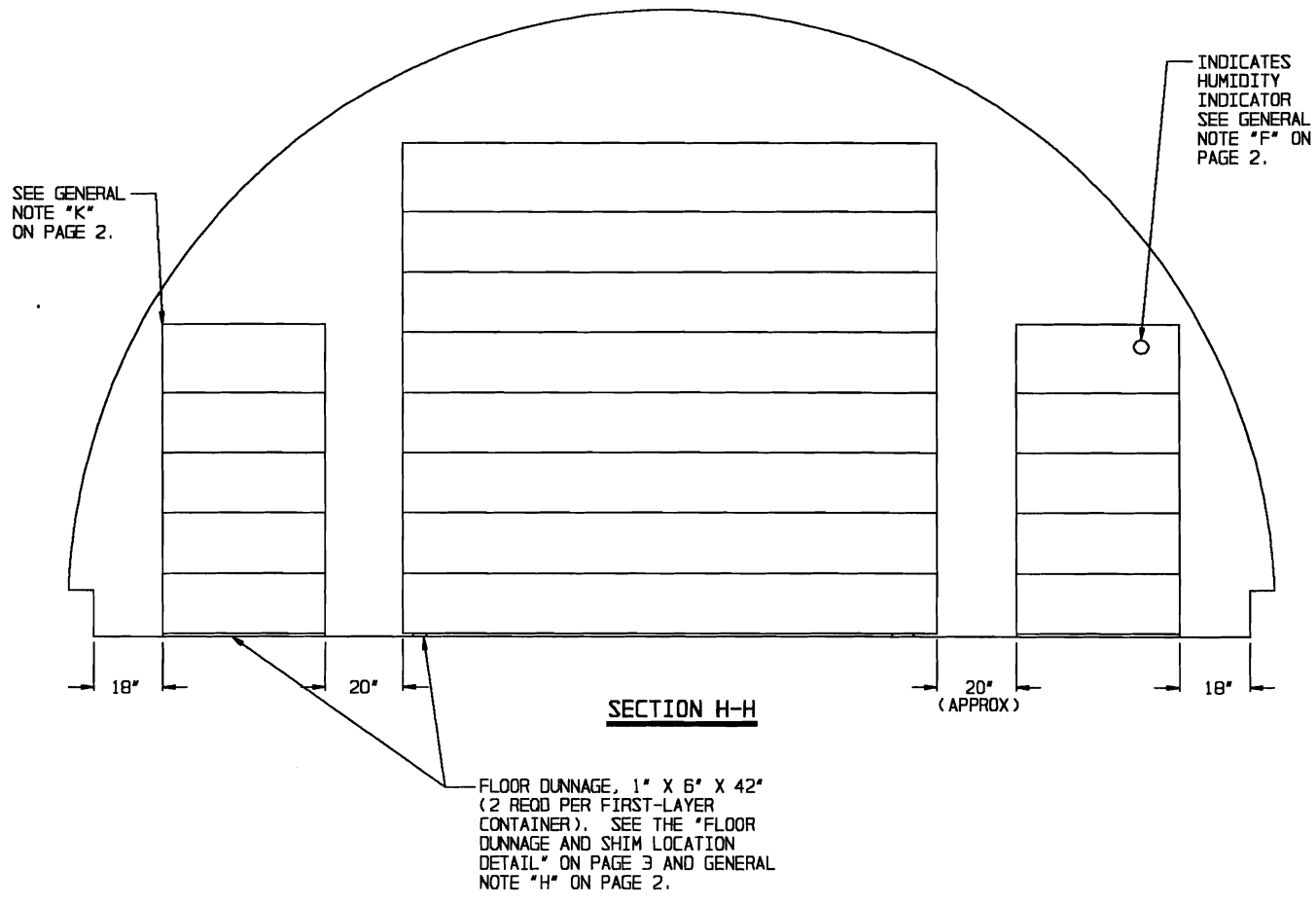
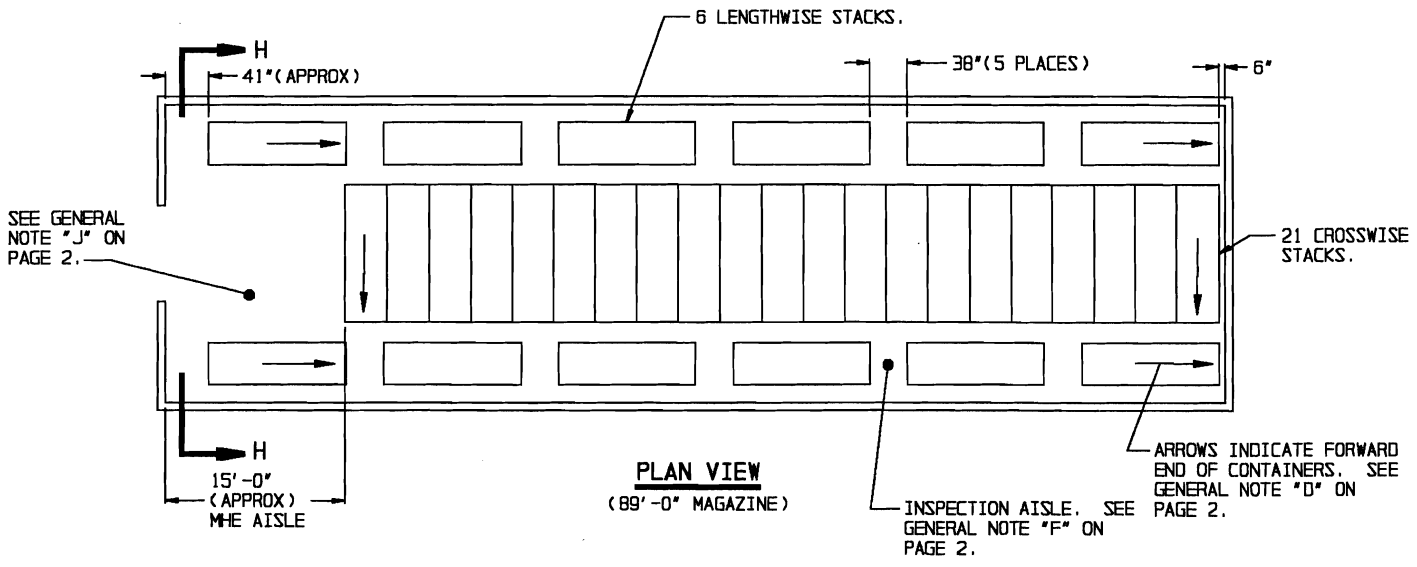


ISOMETRIC VIEW
 (STRADLEY MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *			
TYPE OF STACK	LUMBER	LINEAR FEET	BOARD FEET
CROSSWISE	2" X 6"	7	7
LENGTHWISE	1" X 6"	7	4

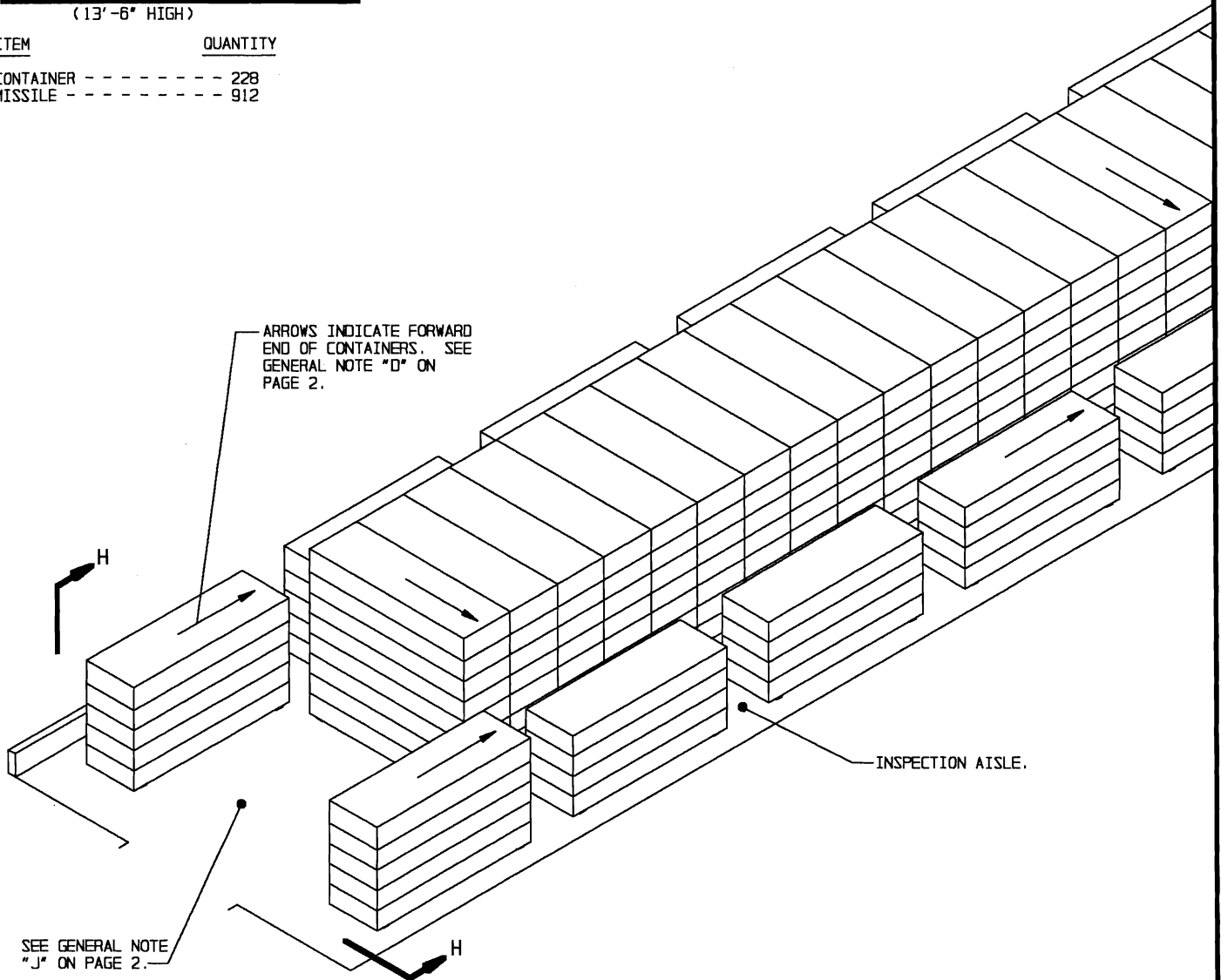
* SEE GENERAL NOTE "H" ON PAGE 2.



STORAGE IN STEEL ARCH MAGAZINE

(13'-6" HIGH)

ITEM	QUANTITY
CONTAINER - - - - -	228
MISSILE - - - - -	912



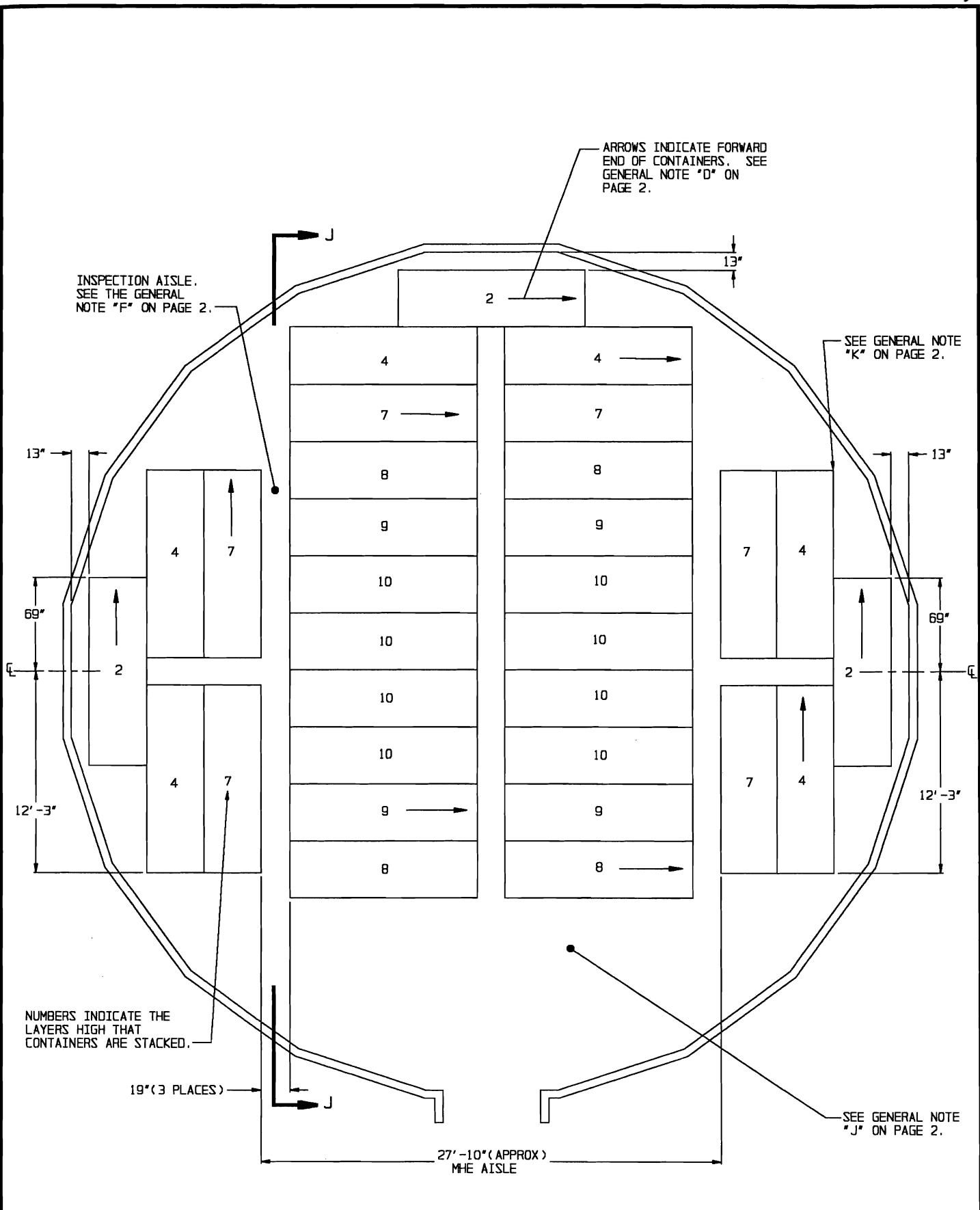
ISOMETRIC VIEW

(89'-0" MAGAZINE)

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *		
ALL STACKS	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
	7	4

* SEE GENERAL NOTE "H" ON PAGE 2.

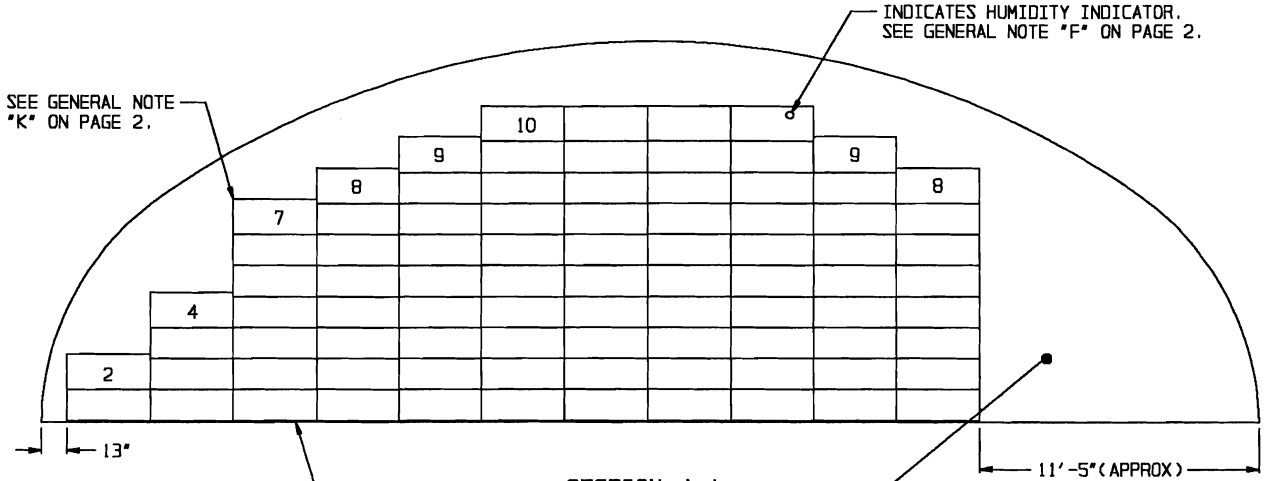


PLAN VIEW
 (52'-0" DIA MAGAZINE)

STORAGE PROCEDURES IN 52'-0" DIA CORBETTA MAGAZINE

STORAGE IN 52'-0" DIA MAGAZINE

ITEM	QUANTITY
CONTAINER - - - - -	220
MISSILE - - - - -	880



SEE GENERAL NOTE "K" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 42" (2 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE AND SHIM LOCATION DETAIL" ON PAGE 3 AND GENERAL NOTE "H" ON PAGE 2.

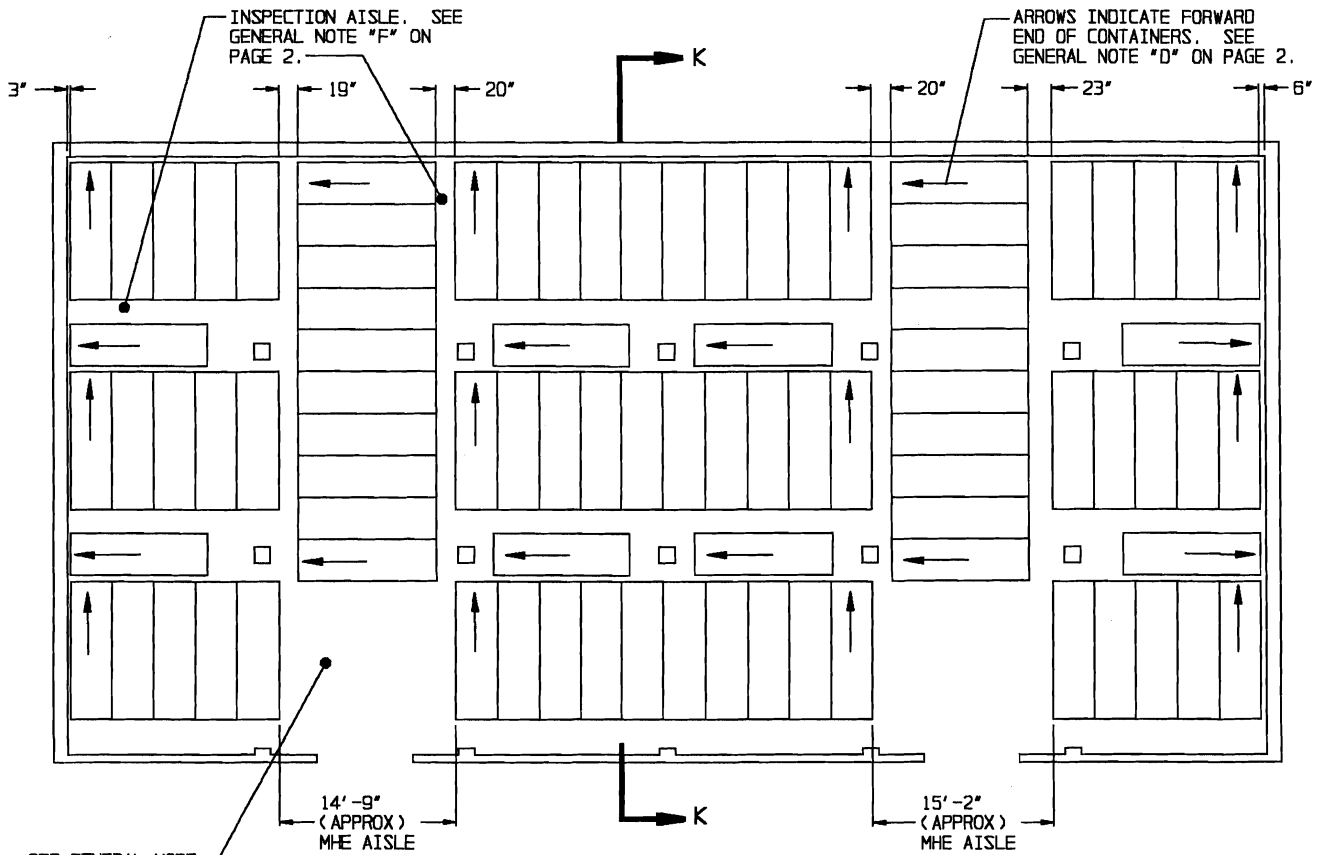
SECTION J-J

ONLY ONE OF THE ROWS OF CONTAINERS IS SHOWN IN THIS SECTION. UNITS LOCATED IN ADJACENT ROWS OR STACKS HAVE NOT BEEN SHOWN FOR CLARITY PURPOSES.

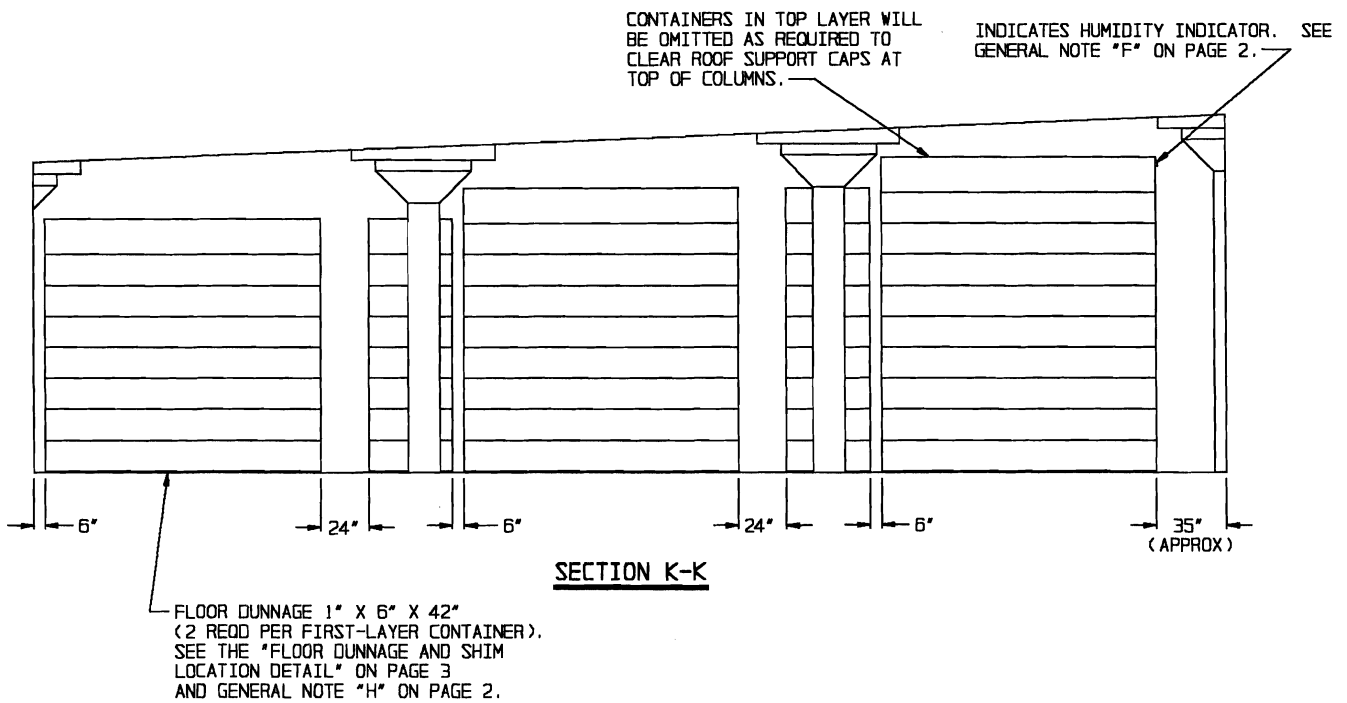
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *		
ALL STACKS	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
	7	4

* SEE GENERAL NOTE "H" ON PAGE 2.



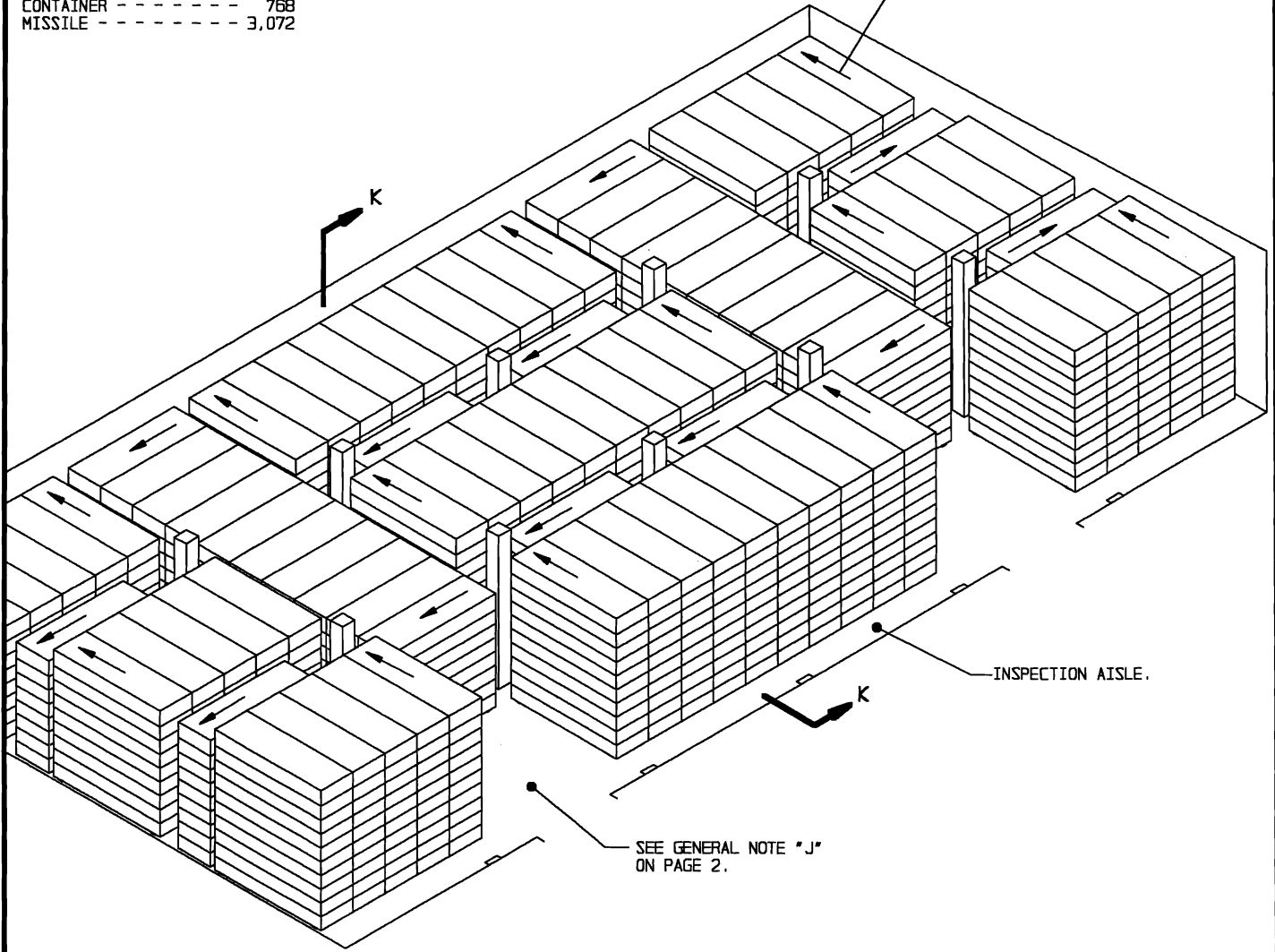
PLAN VIEW
(100'-8" X 50'-0" MAGAZINE)



STORAGE IN 100'-8" X 50'-0" MAGAZINE

ITEM	QUANTITY
CONTAINER - - - - -	768
MISSILE - - - - -	3,072

ARROWS INDICATE FORWARD END OF CONTAINERS. SEE GENERAL NOTE "D" ON PAGE 2.



ISOMETRIC VIEW

(100'-8" X 50'-0" MAGAZINE)

SEE GENERAL NOTE "J" ON PAGE 2.

INSPECTION AISLE.

FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS", SEE PAGE 2.

BILL OF MATERIAL (PER FIRST LAYER CONTAINER) *		
ALL STACKS	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
	7	4

* SEE GENERAL NOTE "H" ON PAGE 2.

