

STORAGE IN APPROVED MAGAZINES OF CBU-87 AND CBU-89 SERIES MUNITIONS PACKED IN CNU-411/E AND/OR CNU-411A/E METAL CONTAINERS

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U.S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>David A. Perkinson</i> SMCAR-ESK		DRAFTSMAN INGEBORG DEPPE	
		ENGINEER M. DAEUMER	
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND <i>Allen L. Syng</i>		SUPPLY ENGINEERING DIVISION <i>Thomas J. Michals</i>	
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL		LOGISTICS ENGINEERING OFFICE <i>William J. Ernst</i>	
MAY 1987			
REVISION NO. 1	OCTOBER 1994	CLASS	DIVISION
SEE THE REVISION LISTING ON PAGE 2		19	48
		DRAWING	FILE
		7102	SP 1-3-4-14-22J18

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 CBU-87 AND CBU-89 SERIES MUNITIONS PACKED IN CNU-411/E AND/OR CNU-411A/E CONTAINERS. FOR DETAILS OF THE CNU-411/E CONTAINER, SEE U.S. AIR FORCE DRAWING NO. 8394441 AND THE DETAILS ON PAGE 3.
- CONTAINER DIMENSIONS ---- 100" L X 38-3/4" W X
25-5/8" H
GROSS WEIGHT ----- 2,360 LBS (APPROX)
CUBE ----- 57.5 CUBIC FEET (APPROX)
- DIMENSIONS OF THE CNU-411A/E CONTAINER, MAY VARY SLIGHTLY FROM THOSE OF THE CNU-411/E CONTAINER; HOWEVER, THE PROCEDURES DEPICTED HEREIN WILL APPLY. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CNU-411/E OR CNU-411A/E CONTAINER WITH CONTENTS. SEE GENERAL NOTE "E" BELOW.
- C. 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.
- D. 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.
- E. AISLE DIMENSIONS SHOWN FOR STORAGE PROCEDURES IN MAGAZINES MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS, AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT (MHE), HOWEVER, AN 18" MINIMUM INSPECTION AISLE MUST BE MAINTAINED AT THE END OF CONTAINERS WHERE HUMIDITY INDICATORS ARE LOCATED.
- F. THE MAXIMUM FLOOR LOAD FOR A MAGAZINE AS PRESCRIBED BY LOCAL STANDARDS WILL NOT BE EXCEEDED.
- G. THE USE OF "FLOOR DUNNAGE" UNDER EACH FIRST-LAYER CONTAINER IS OPTIONAL, ALTHOUGH THE USE OF THIS TYPE OF DUNNAGE IS DELINEATED WITHIN THIS STORAGE PROCEDURE DRAWING. THE PURPOSE OF FLOOR DUNNAGE IS TO HELP KEEP THE RUNNERS OF THE CONTAINERS DRY, THUS AIDING IN PREVENTING DETERIORATION DUE TO CORROSION, ETC., 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, THICKER FLOOR DUNNAGE SHOULD BE USED, IF REQUIRED, TO ACHIEVE THE DESIRED OBJECTIVE.
- H. IF AVAILABLE MHE PERMITS, ADDITIONAL CONTAINERS MAY BE STORED WITHIN THE MHE AREA AND/OR OTHER AVAILABLE AREA OF THE MAGAZINE.
- J. 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.
- K. OTHER COMPATIBLE ITEMS MAY BE STORED IN A MAGAZINE WHICH IS PARTIALLY FILLED WITH THE DESIGNATED ITEM.
- L. 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.

(CONTINUED AT RIGHT).

MATERIAL SPECIFICATIONS

LUMBER - - - - - SEE TM 743-200-1, (DUNNAGE LUMBER)
AND FED SPEC MM-L-751.

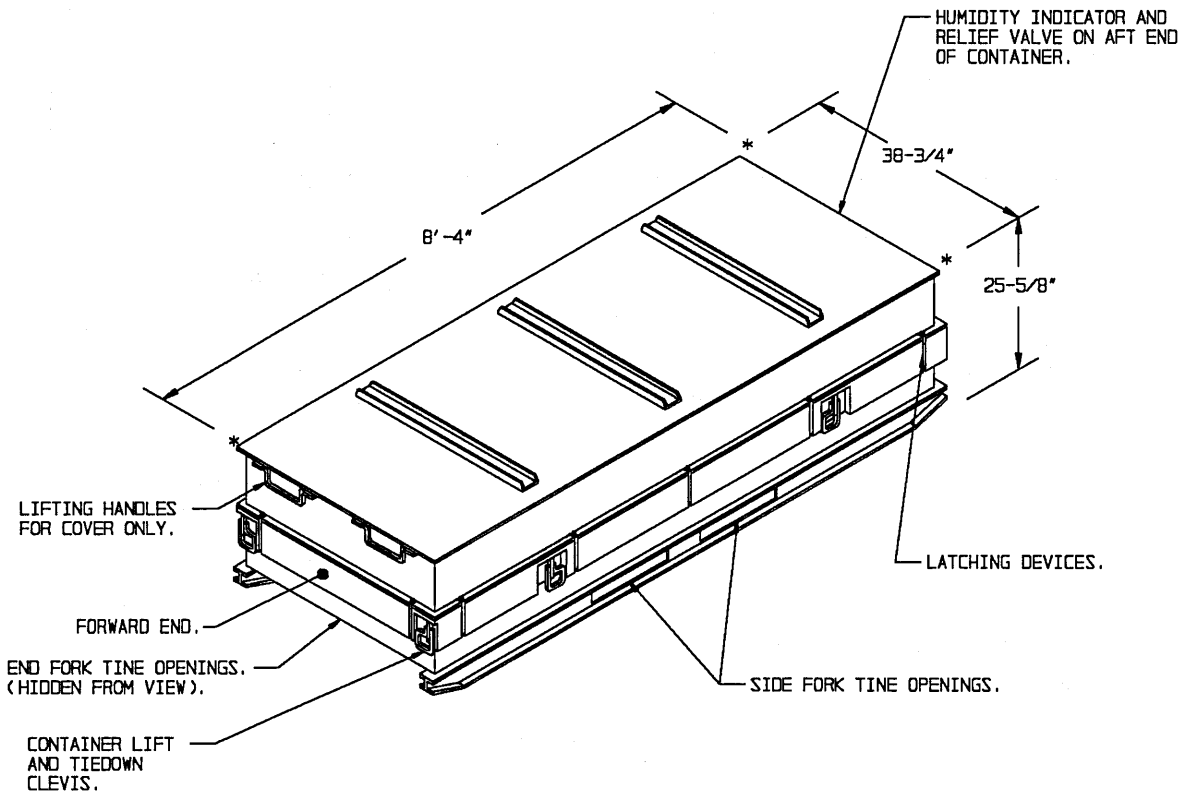
(GENERAL NOTES CONTINUED)

- M. ANY CONTAINER THAT DOES NOT CONTAIN TWO ITEMS WILL NOT BE BURIED IN STORAGE. IT MUST BE POSITIONED ON TOP OF THE LAST STACK ADJACENT TO OR NEAREST THE MAGAZINE DOOR.
- N. STORAGE OF MULTIPLE LOTS IN A MAGAZINE WILL REQUIRE CAREFUL PRE-PLANNING SO AS TO INSURE MHE ACCESSIBILITY TO ANY LOT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE APPLICABLE "SPECIAL NOTES" SECTIONS OF THE MULTIPLE LOT STORAGE PROCEDURES TYPICALLY SHOWN ON PAGES 28 THRU 34.
- O. ALTHOUGH SPECIFIC PROCEDURES ARE INCLUDED IN THIS DRAWING FOR STORING MULTIPLE LOTS WITHIN ONE STRUCTURE, THE BASIC STORAGE PATTERNS AS SHOWN ON PAGES 4 THRU 27 CAN ALSO BE ADAPTED FOR THE STORING OF MORE THAN ONE LOT. MULTIPLE LOTS OF CONTAINERS WHEN STORED IN ACCORDANCE WITH THE BASIC STORAGE PATTERN MAY BE STORED WITH ONE OR MORE ROWS USED FOR EACH LOT. A SPACE OF APPROXIMATELY 1" WILL HAVE TO BE LEFT BETWEEN ADJACENT ROWS CONTAINING DIFFERENT LOTS.
- P. FOR ADDITIONAL REQUIREMENTS AND GUIDANCE, SEE THE SPECIAL NOTES FOR MULTIPLE-LOT STORAGE ON PAGES 28 THRU 34.
- Q. 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.
- R. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- S. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENT MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM, AND ONE POUND EQUALS 0.454KG.
- T. PORTIONS OF THE MAGAZINES, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE STORAGE VIEWS FOR CLARITY PURPOSES.
- U. 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.
- V. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE INCLUDED WITH THE DEPICTED STORAGE METHODS.

REVISIONS

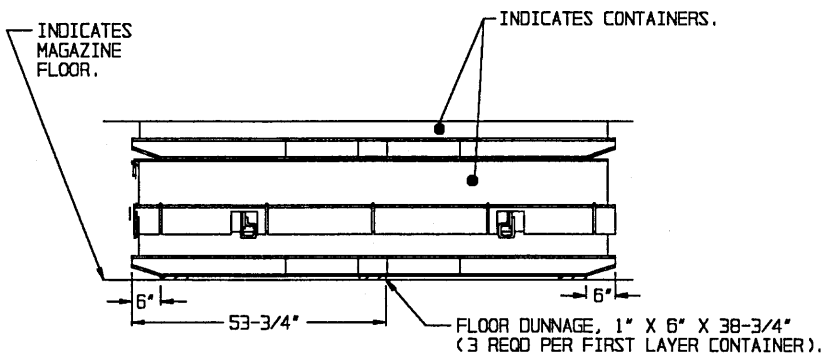
REVISION NO. 1, DATED OCTOBER 1994 CONSISTS OF:

1. UPDATING DRAWING FORMAT AND GENERAL NOTES TO CONFORM TO CURRENT STANDARDS.
2. ADDING CNU-411A/E CONTAINER.
3. REVISING MULTIPLE LOT PROCEDURES IN TYPE III BUNKERS TO PROVIDE ADEQUATE ACCESS FOR INSPECTION OF ALL HUMIDITY INDICATORS.



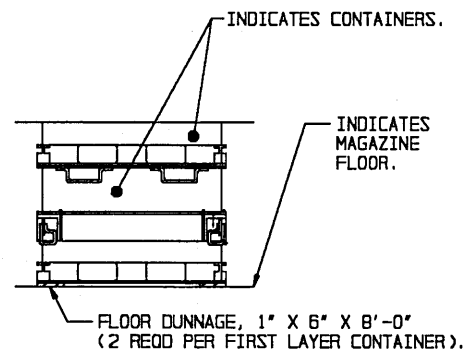
CNU-411/E AND CNU-411A/E CONTAINER

(STACKING HEIGHT 24-13/32")



FLOOR DUNNAGE LOCATION A

SEE NOTE AT RIGHT.



FLOOR DUNNAGE LOCATION B

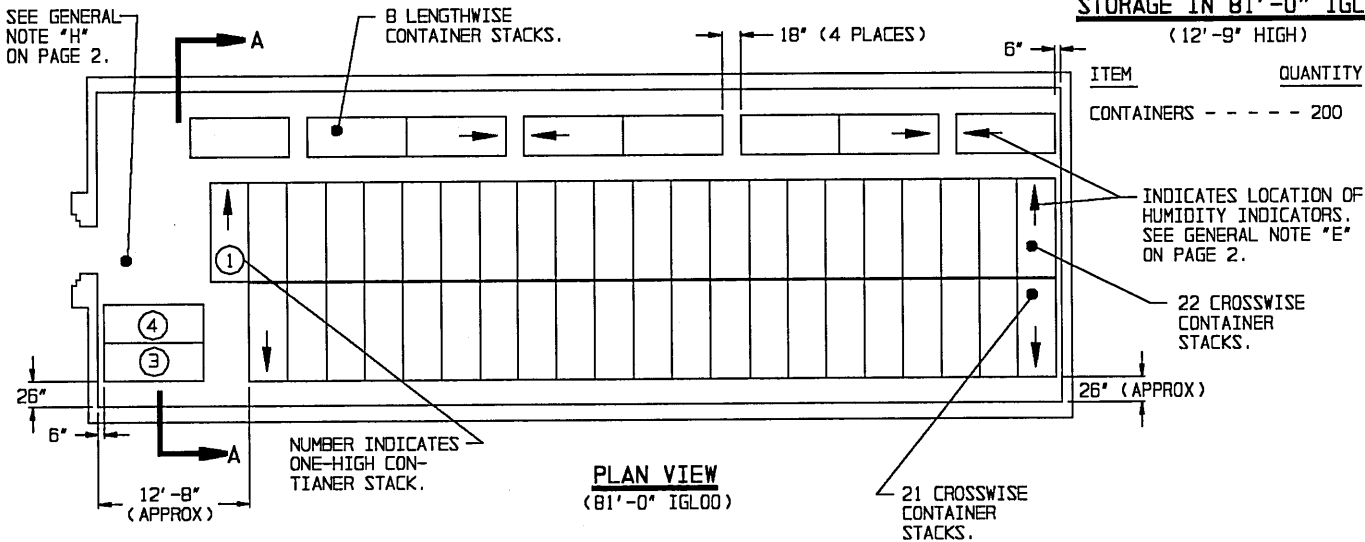
SEE NOTE BELOW.

NOTE: ISOMETRIC VIEWS WITHIN THIS DRAWING DO NOT DEPICT ALL FLOOR DUNNAGE THAT IS REQUIRED WHEN FLOOR DUNNAGE IS USED. FLOOR DUNNAGE IS SHOWN AT SOME LOCATIONS TO PROVIDE POSITIONING GUIDANCE.

STORAGE IN 81'-0" IGLOO

(12'-9" HIGH)

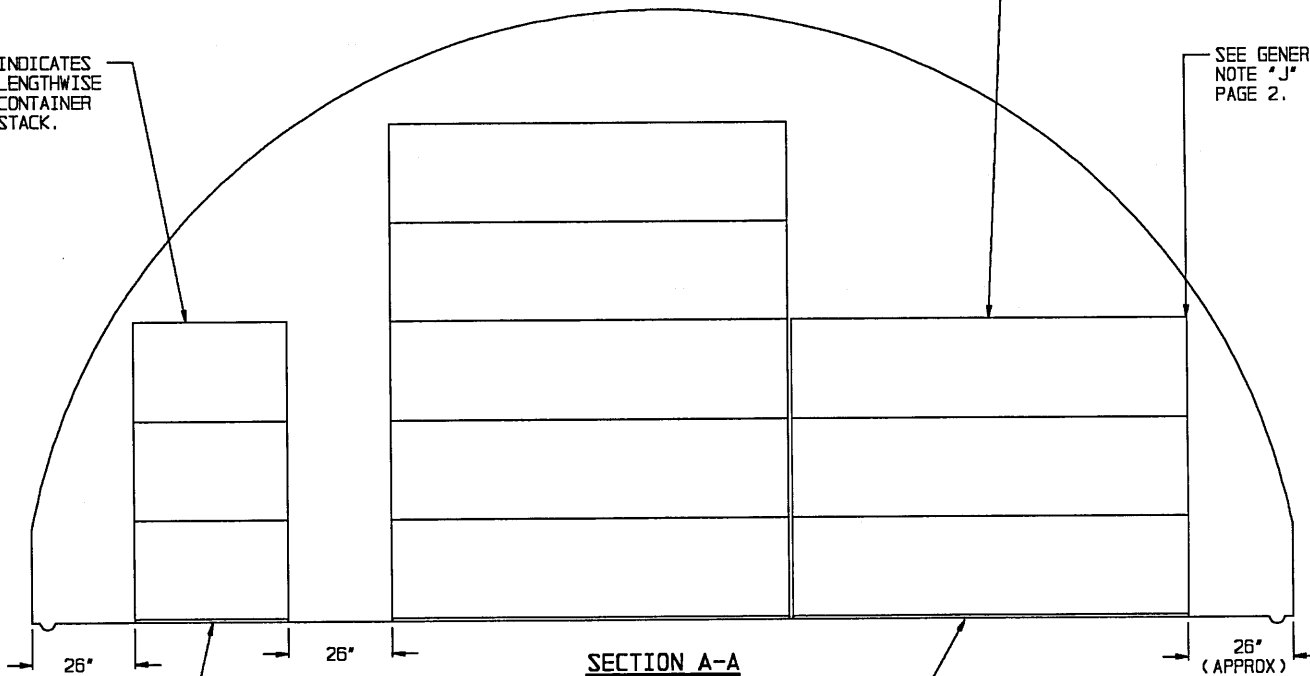
SEE GENERAL NOTE "H" ON PAGE 2.



INDICATES LENGTHWISE CONTAINER STACK.

INDICATES CROSSWISE CONTAINER STACK.

SEE GENERAL NOTE "J" ON PAGE 2.



STORAGE IN 60'-8" IGL00

(12'-9" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	145

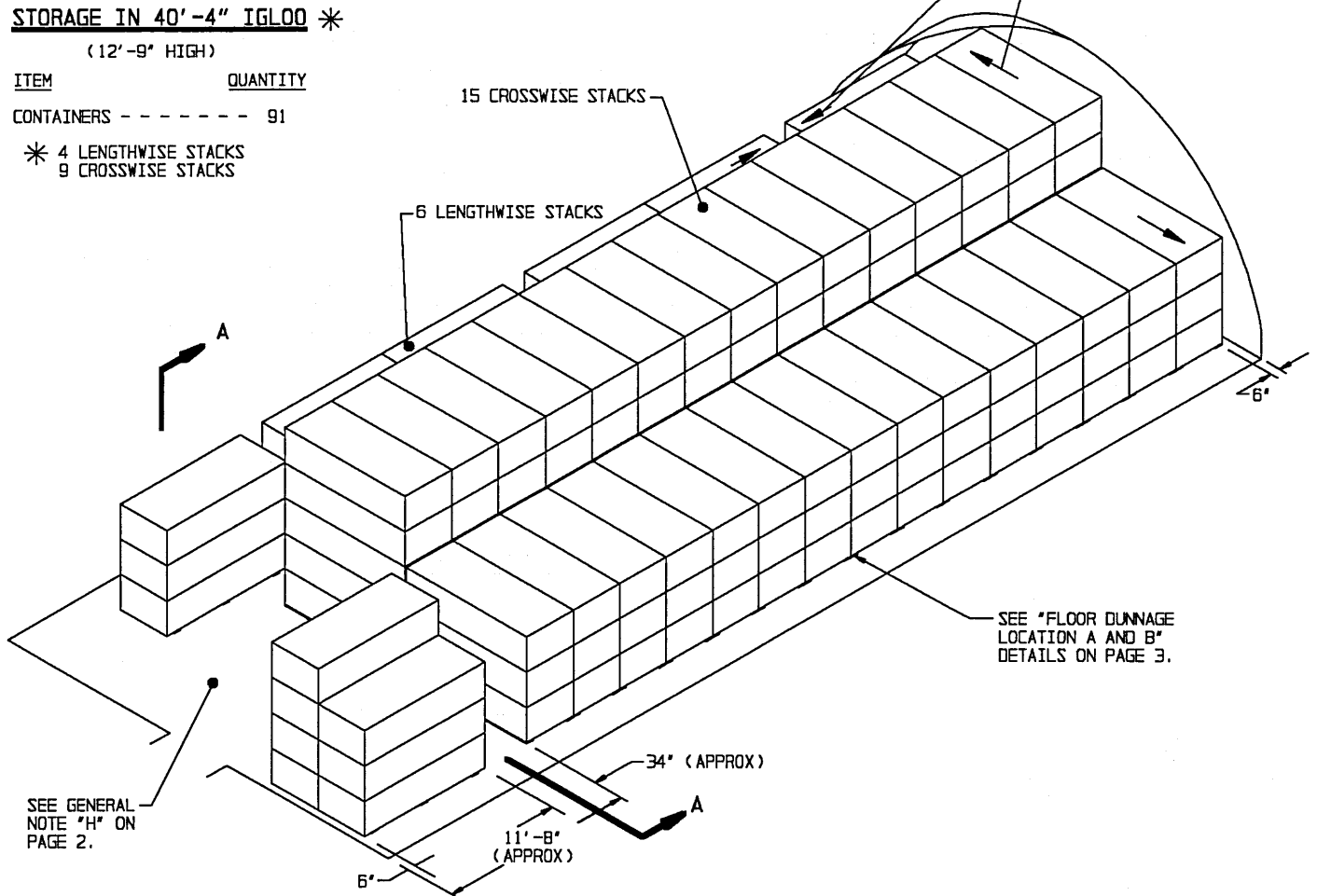
STORAGE IN 40'-4" IGL00 *

(12'-9" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	91

* 4 LENGTHWISE STACKS
9 CROSSWISE STACKS

INDICATES LOCATION OF HUMIDITY INDICATORS. SEE GENERAL NOTE "E" ON PAGE 2.



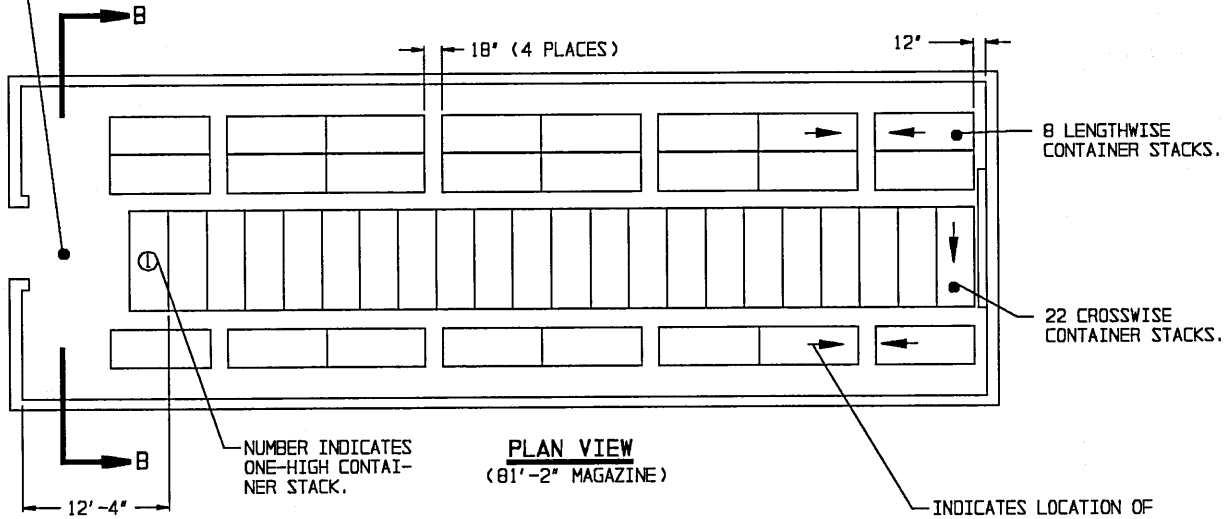
ISOMETRIC VIEW

(60'-8" IGL00)

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

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

SEE GENERAL NOTE "H" ON PAGE 2.

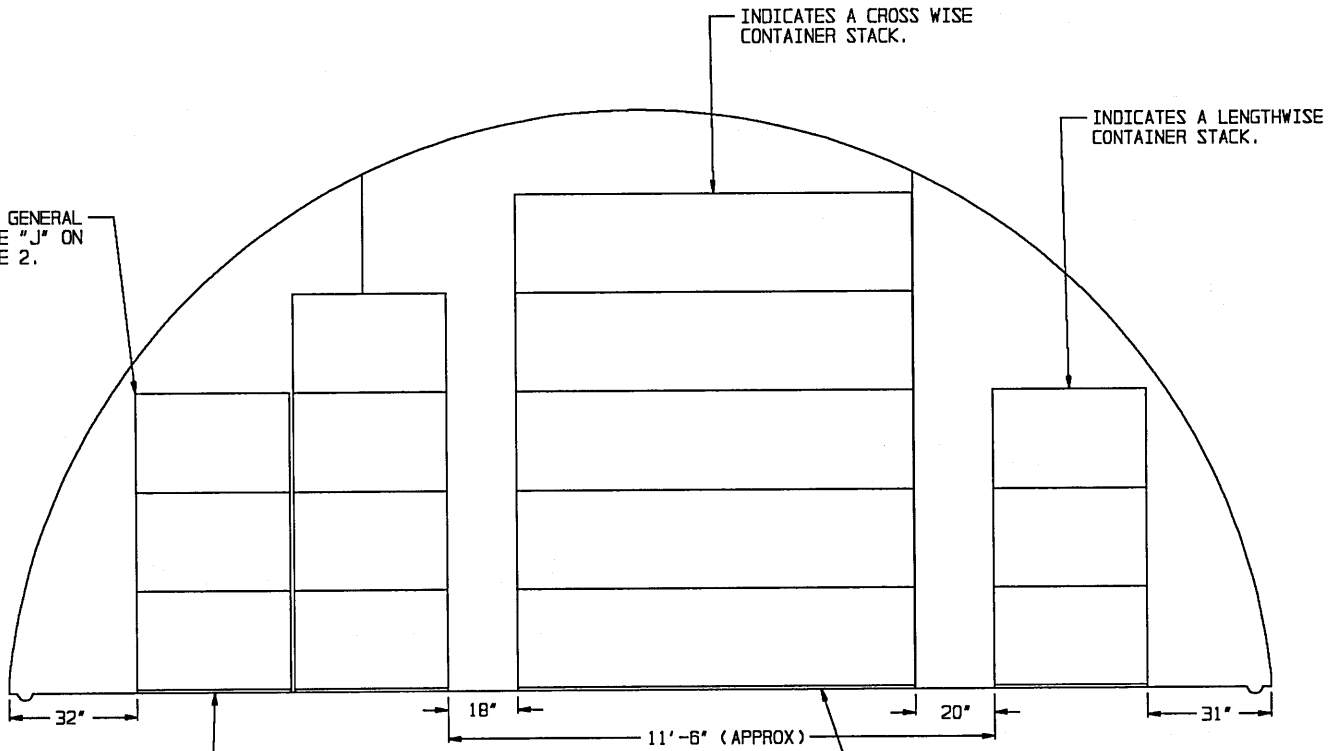


PLAN VIEW
(81'-2" MAGAZINE)

NUMBER INDICATES ONE-HIGH CONTAINER STACK.

INDICATES LOCATION OF HUMIDITY INDICATOR. SEE GENERAL NOTE "E" ON PAGE 2.

SEE GENERAL NOTE "J" ON PAGE 2.



SECTION B-B

FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

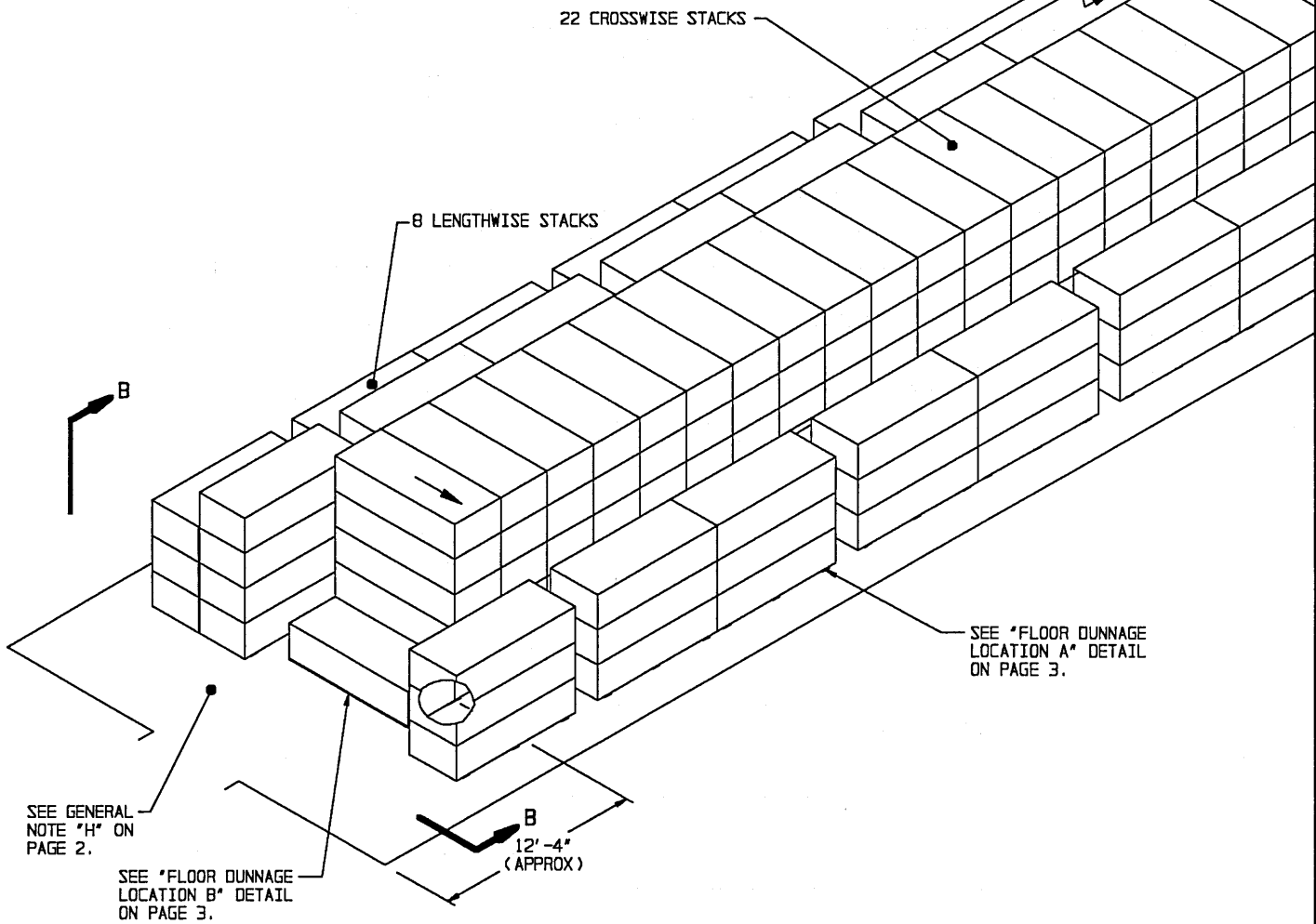
FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

STORAGE IN 81'-2" MAGAZINE

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

ITEM	QUANTITY
CONTAINERS - - - - -	186

INDICATES LOCATION OF HUMIDITY INDICATORS.



ISOMETRIC VIEW
(81'-2" MAGAZINE)

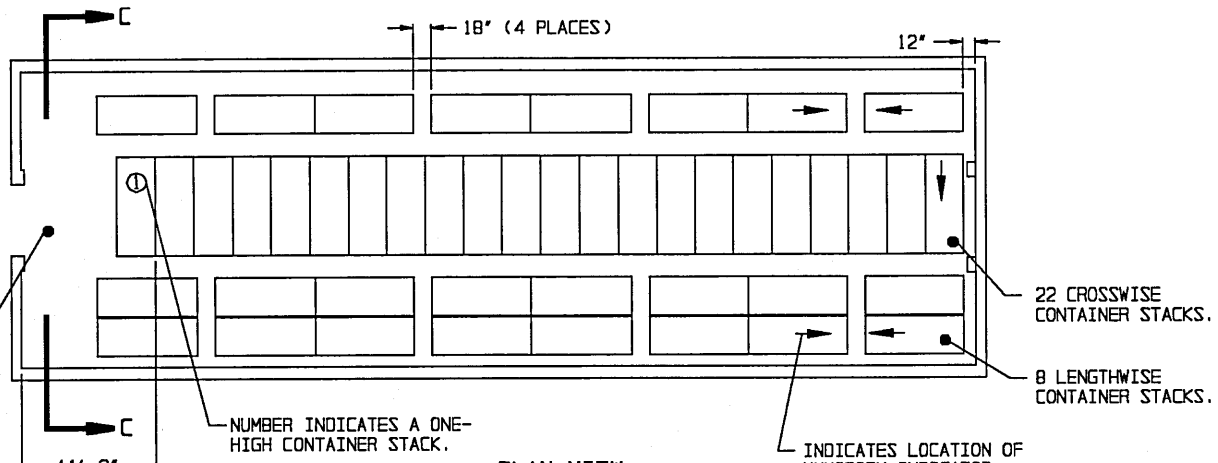
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS" SEE PAGE 2.

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

STORAGE IN 80'-0" MAGAZINE

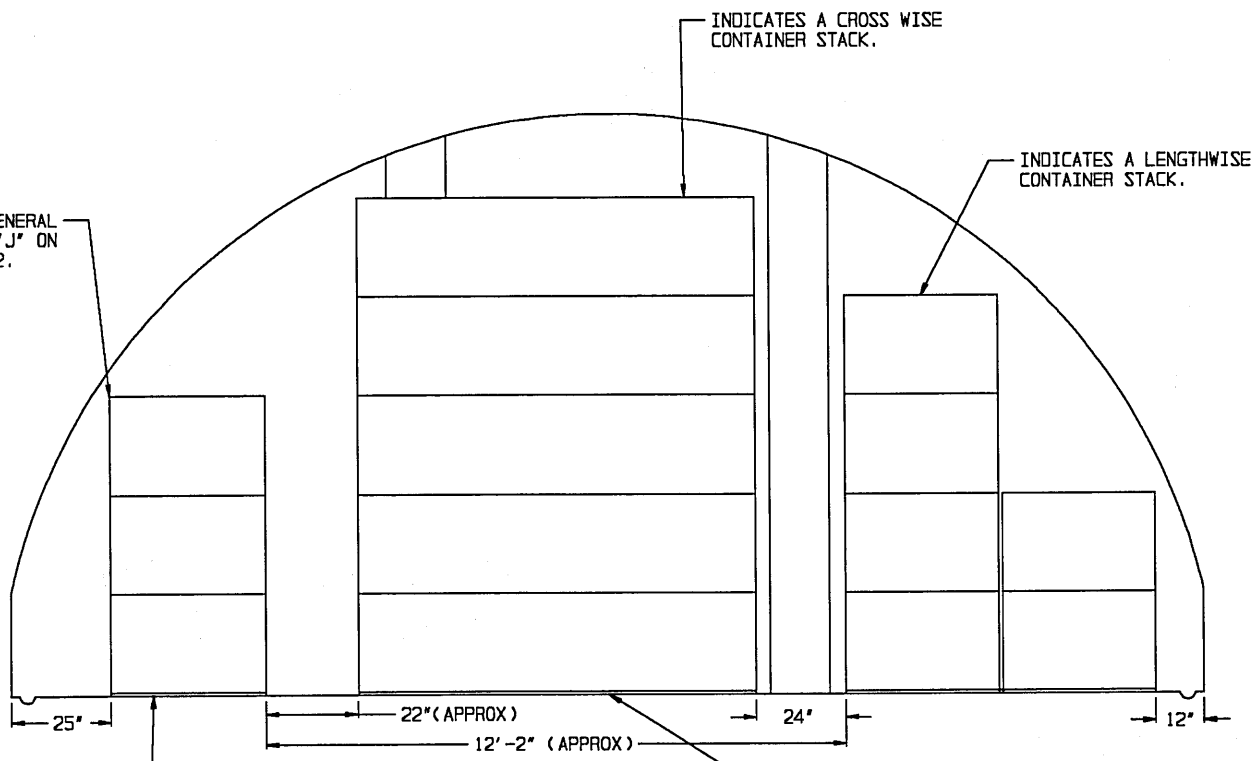
(12'-1-3/4" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	178



PLAN VIEW
(80'-0" MAGAZINE)

SEE GENERAL NOTE "H" ON PAGE 2.



SECTION C-C

SEE GENERAL NOTE "J" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

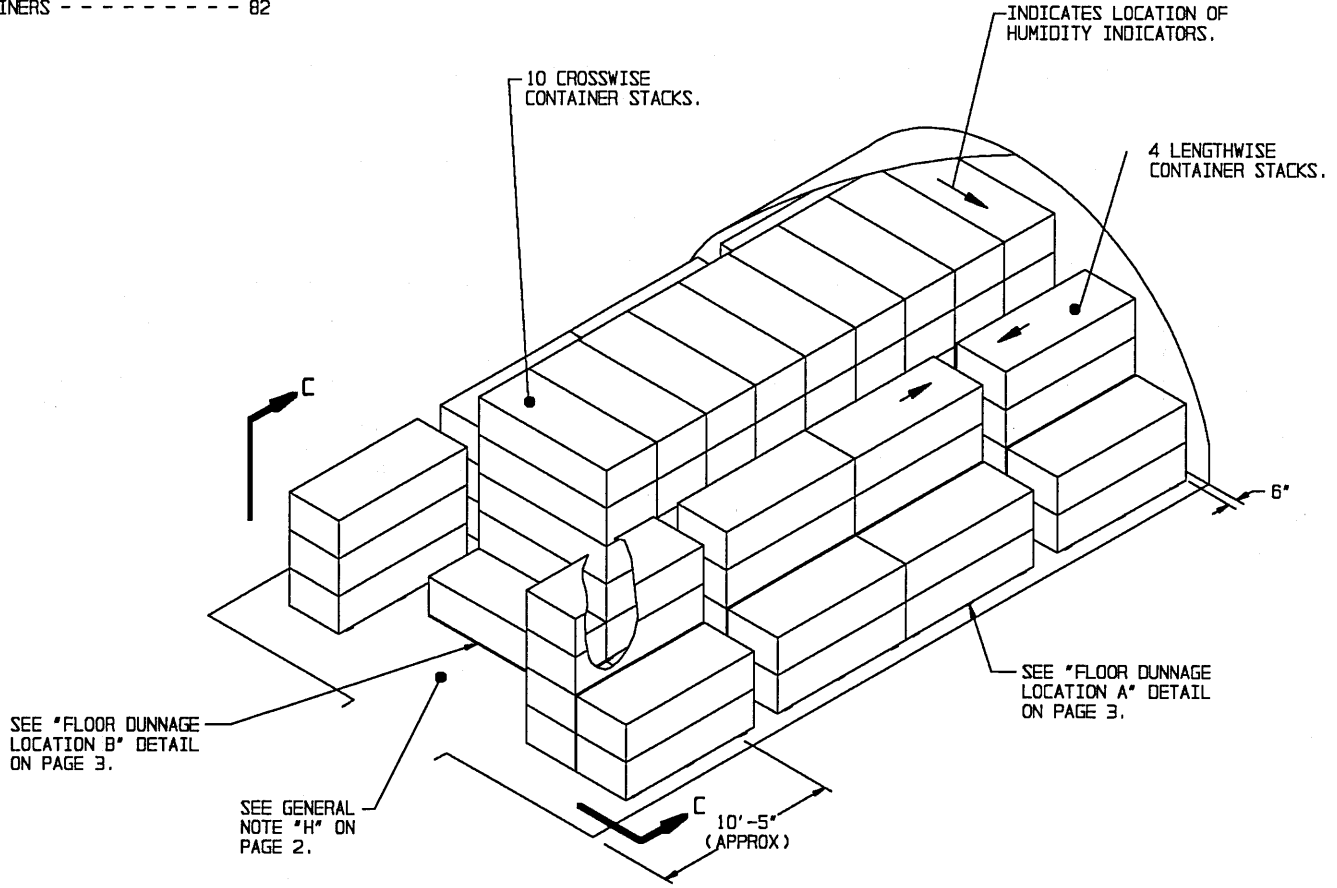
FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

STORAGE IN 40'-0" MAGAZINE

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

ITEM QUANTITY

CONTAINERS - - - - - 82



ISOMETRIC VIEW
(40'-0" MAGAZINE)

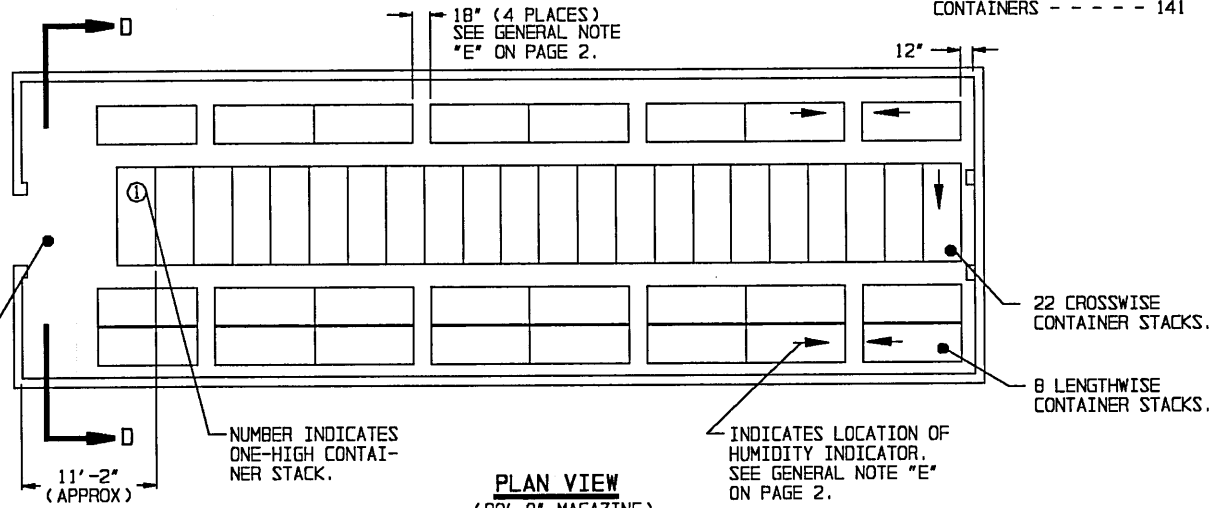
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS" SEE PAGE 2.

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

STORAGE IN 80'-0" MAGAZINE

(11'-0" HIGH)

ITEM	QUANTITY
CONTAINERS	----- 141



PLAN VIEW
(80'-0" MAGAZINE)

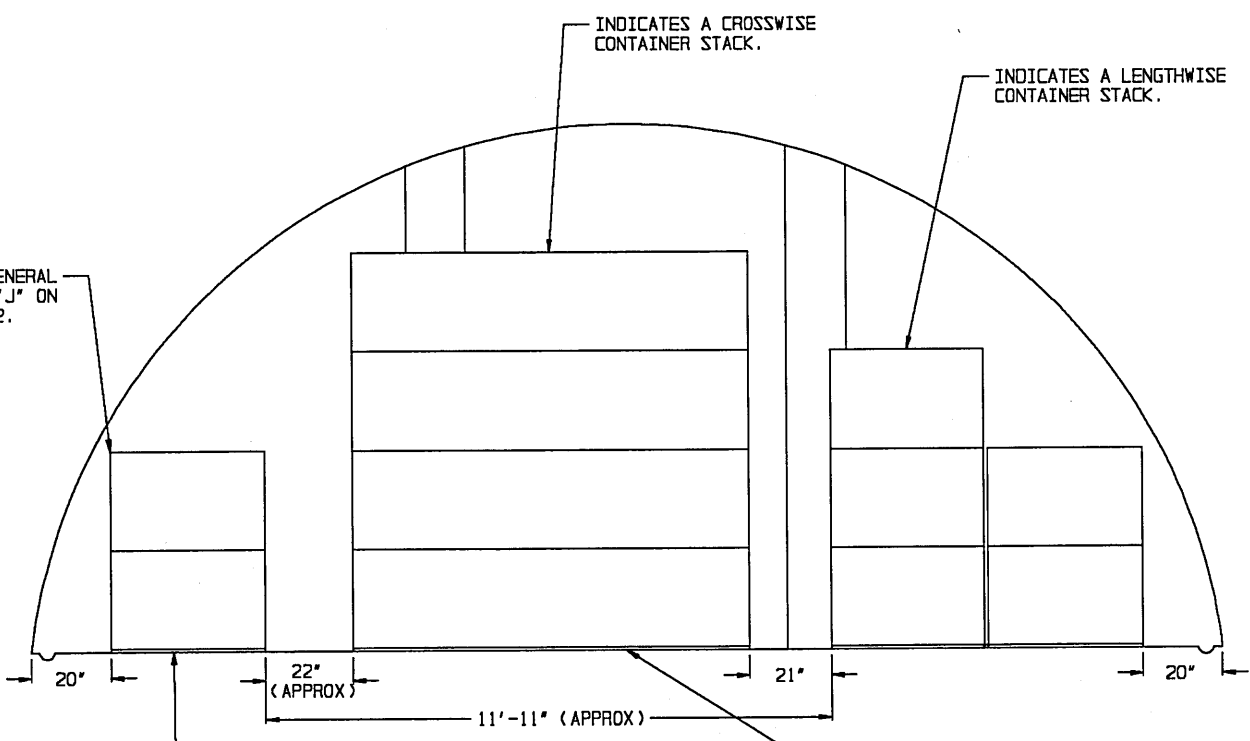
SEE GENERAL NOTE "H" ON PAGE 2.

NUMBER INDICATES ONE-HIGH CONTAINER STACK.

INDICATES LOCATION OF HUMIDITY INDICATOR. SEE GENERAL NOTE "E" ON PAGE 2.

22 CROSSWISE CONTAINER STACKS.

8 LENGTHWISE CONTAINER STACKS.



SECTION D-D

SEE GENERAL NOTE "J" ON PAGE 2.

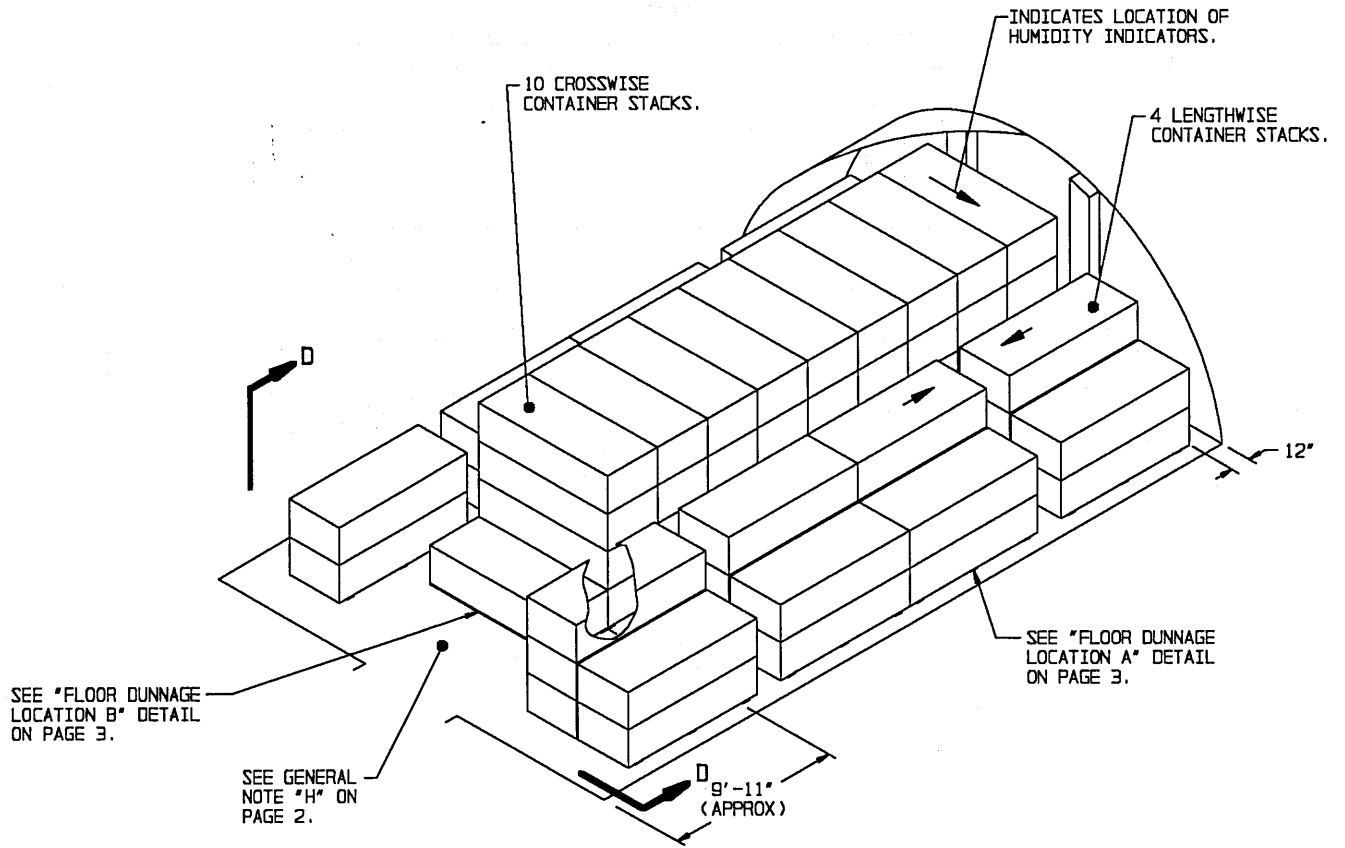
FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 ROWS PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 ROWS PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

STORAGE IN 40'-0" MAGAZINE

(11'-0" HIGH)

ITEM QUANTITY
CONTAINERS - - - - - 65



ISOMETRIC VIEW
(40'-0" MAGAZINE)

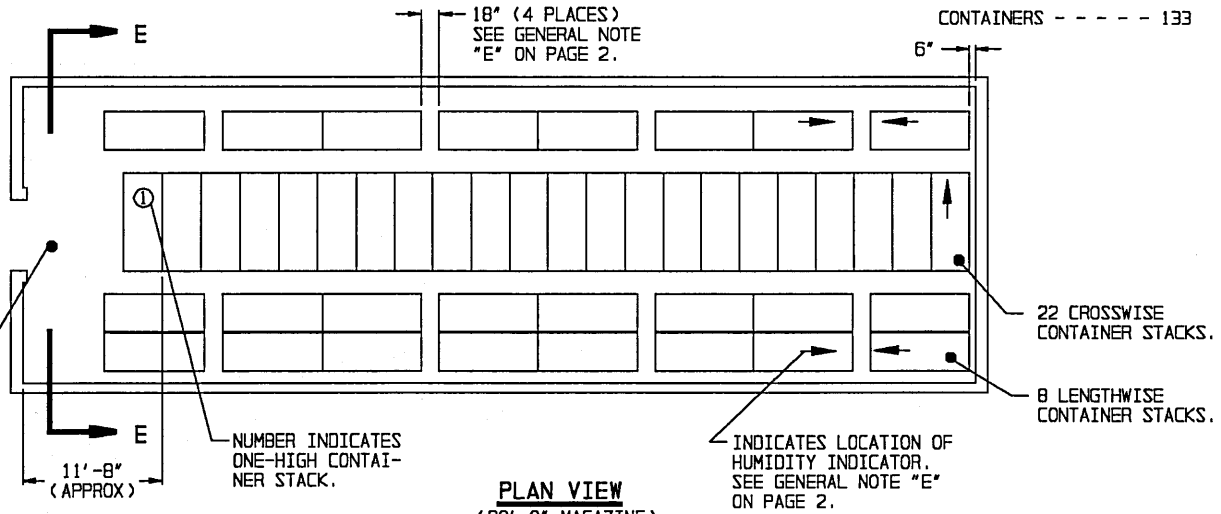
FOR "GENERAL NOTES" AND "MATERIAL SPECIFICATIONS" SEE PAGE 2.

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

STORAGE IN 80'-0" MAGAZINE

(10'-0" HIGH)

ITEM	QUANTITY
CONTAINERS - - - - -	133



PLAN VIEW
(80'-0" MAGAZINE)

SEE GENERAL NOTE "H" ON PAGE 2.

NUMBER INDICATES ONE-HIGH CONTAINER STACK.

INDICATES LOCATION OF HUMIDITY INDICATOR. SEE GENERAL NOTE "E" ON PAGE 2.

22 CROSSWISE CONTAINER STACKS.

8 LENGTHWISE CONTAINER STACKS.

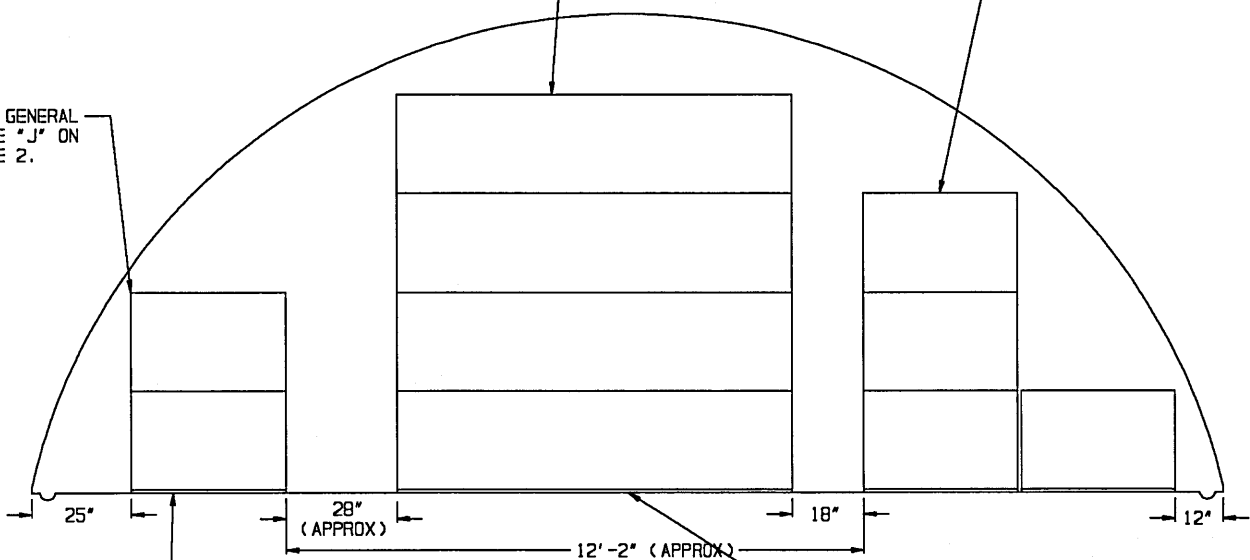
11'-8" (APPROX)

18" (4 PLACES)
SEE GENERAL NOTE "E" ON PAGE 2.

INDICATES A CROSSWISE CONTAINER STACK.

INDICATES A LENGTHWISE CONTAINER STACK.

SEE GENERAL NOTE "J" ON PAGE 2.



SECTION E-E

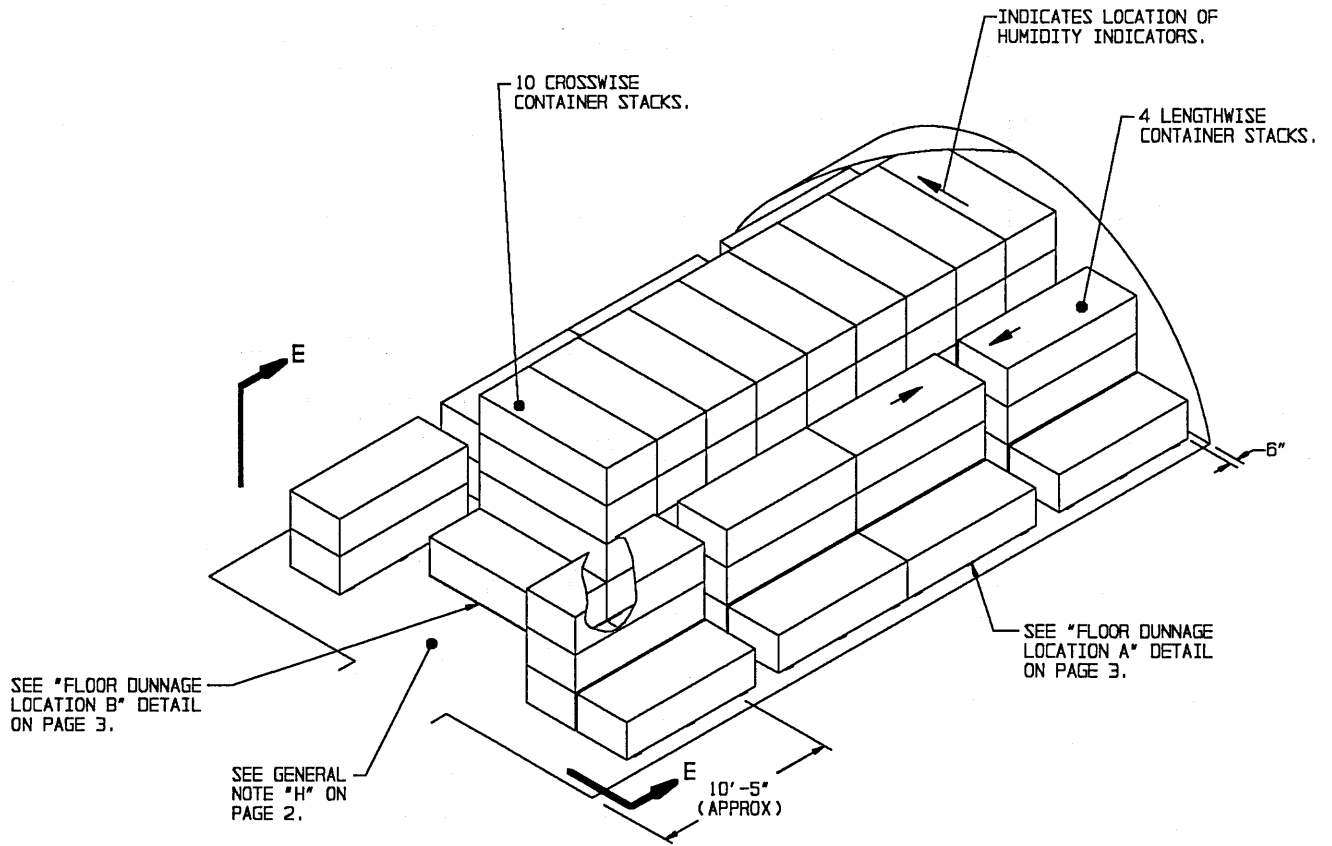
FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

STORAGE IN 40'-0" MAGAZINE

(10'-0" HIGH)

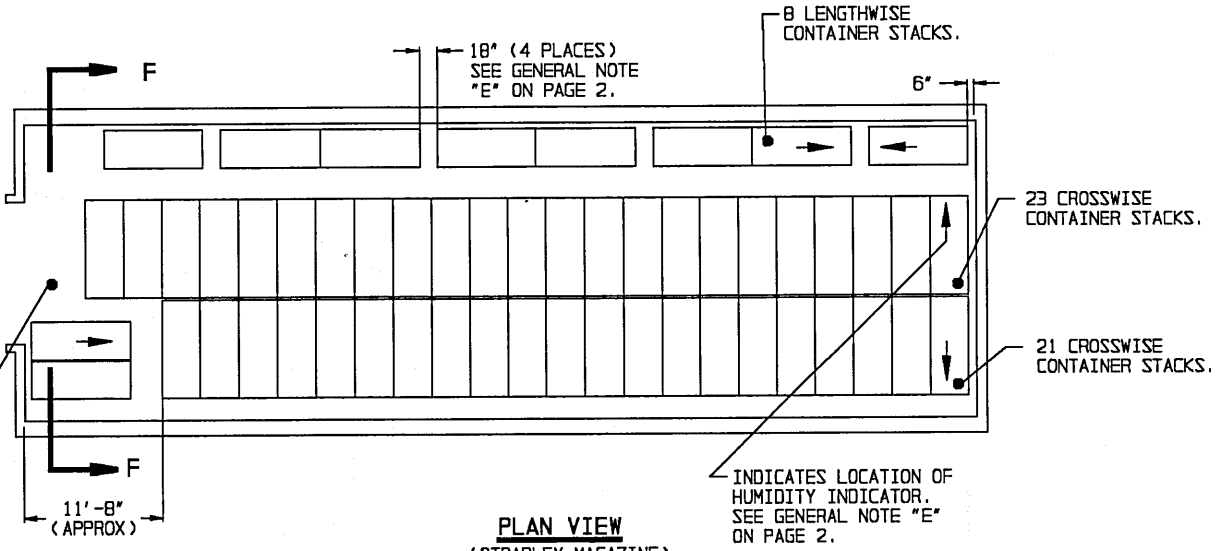
ITEM	QUANTITY
CONTAINERS - - - - -	61



ISOMETRIC VIEW
(40'-0" MAGAZINE)

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

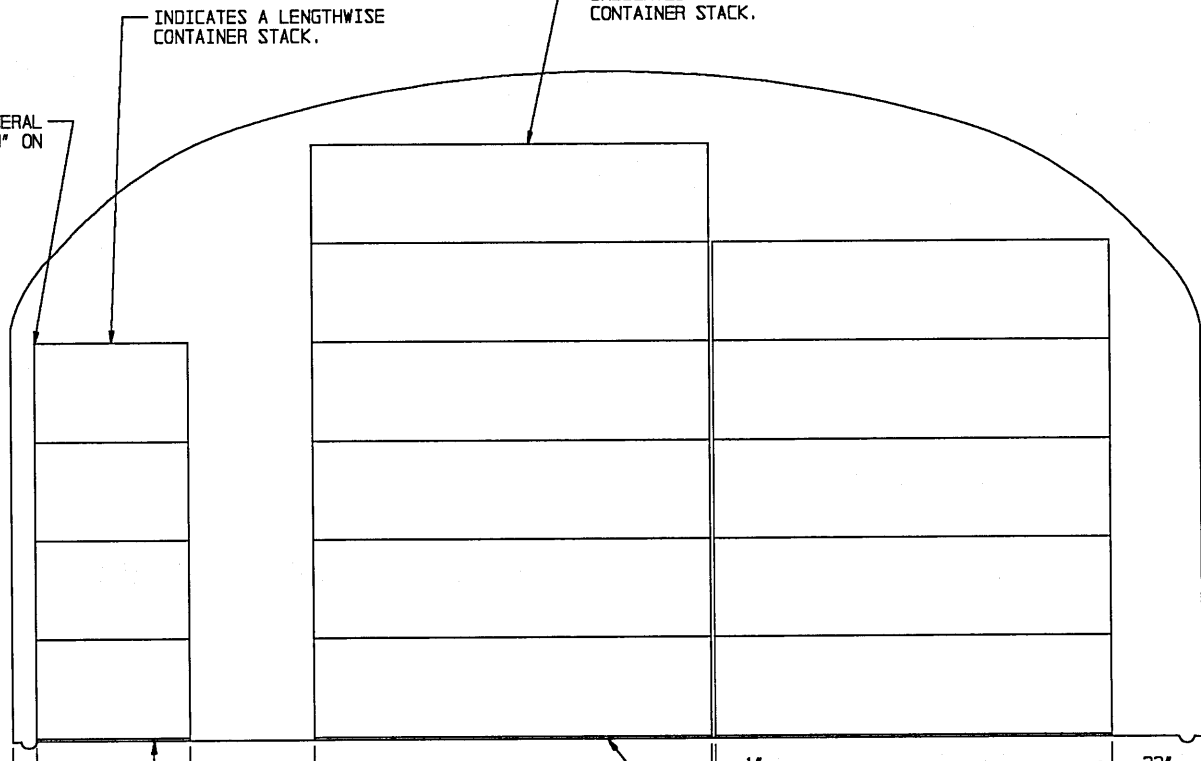
BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5



PLAN VIEW
(STRADLEY MAGAZINE)

SEE GENERAL NOTE "H" ON PAGE 2.

INDICATES LOCATION OF HUMIDITY INDICATOR. SEE GENERAL NOTE "E" ON PAGE 2.



SEE GENERAL NOTE "J" ON PAGE 2.

INDICATES A LENGTHWISE CONTAINER STACK.

INDICATES A CROSSWISE CONTAINER STACK.

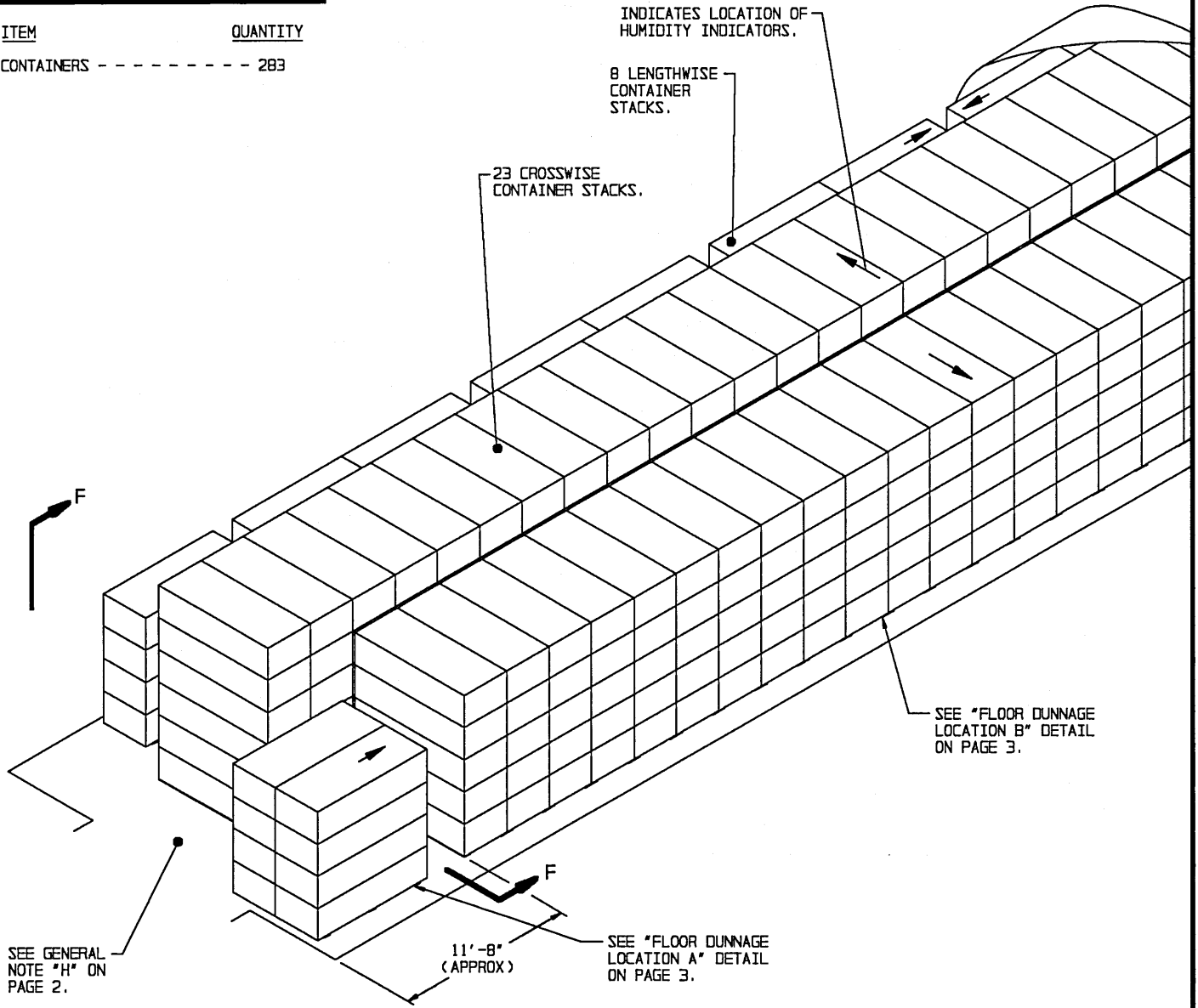
FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

SECTION F-F

FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

STORAGE IN STRADLEY MAGAZINE

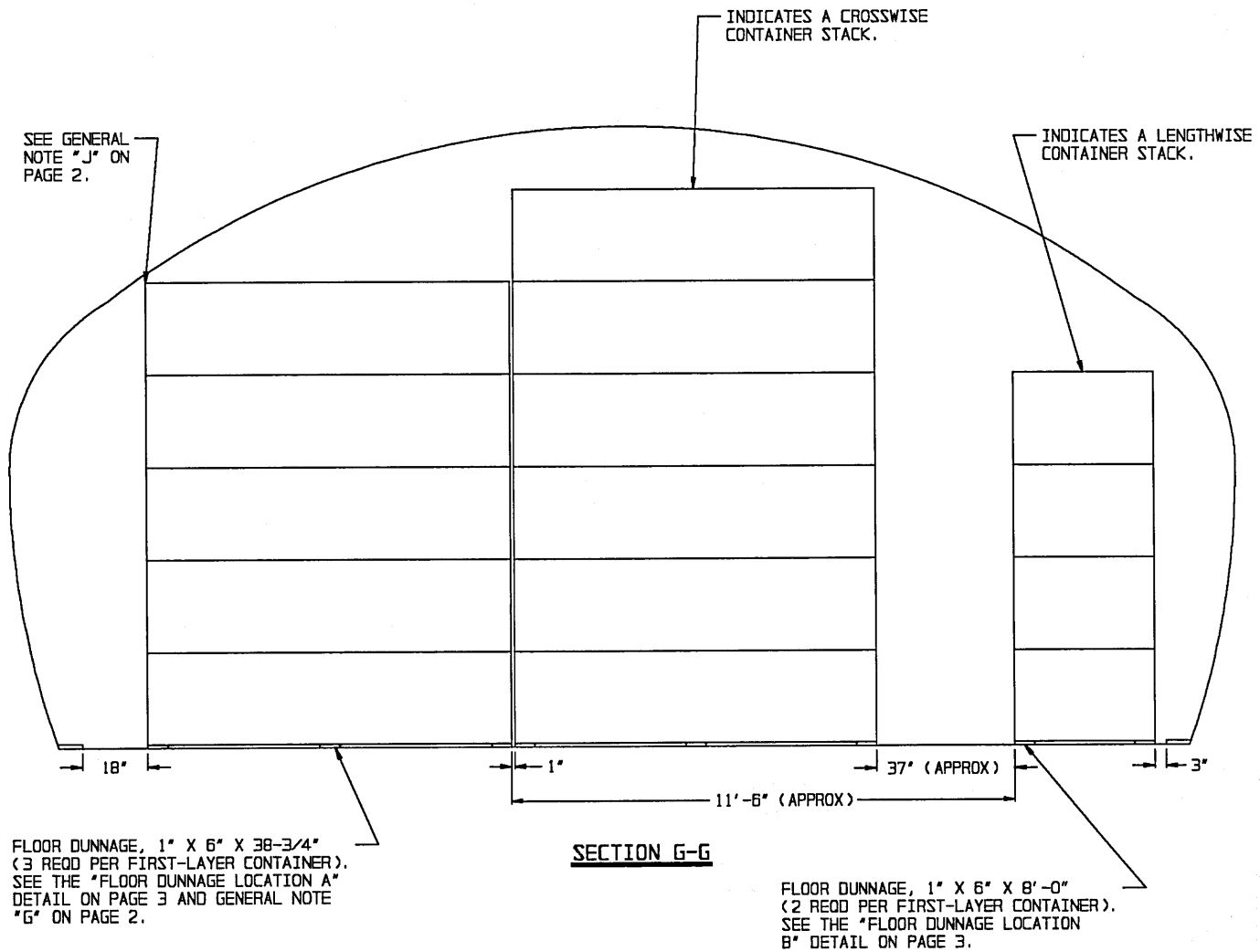
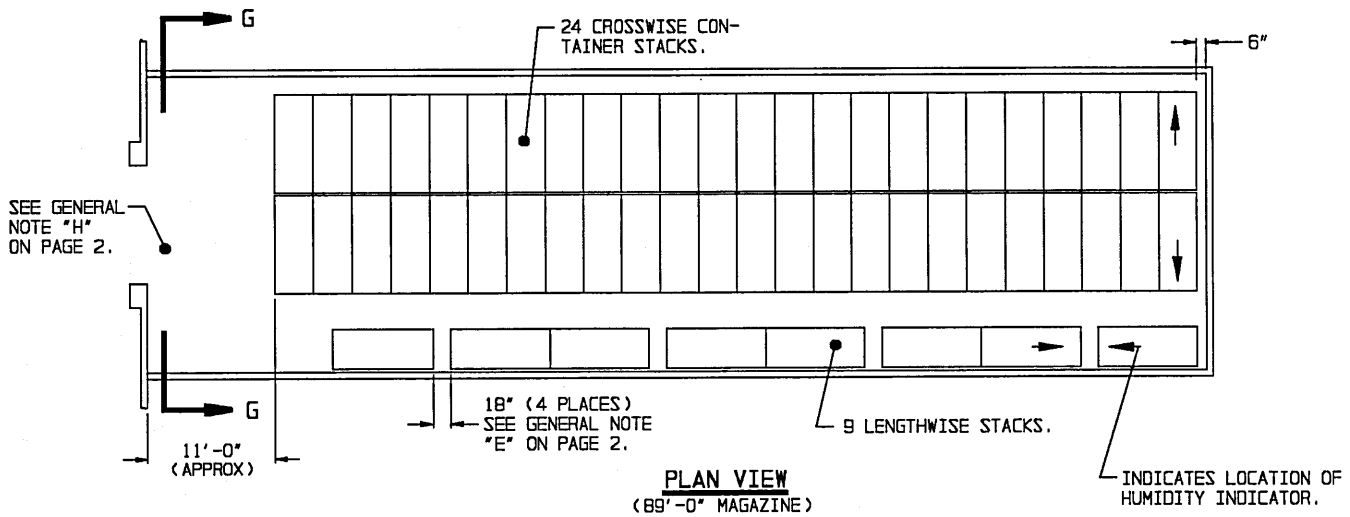
ITEM	QUANTITY
CONTAINERS - - - - -	283



ISOMETRIC VIEW
(STRADLEY MAGAZINE)

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

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5



STORAGE IN OVAL ARCH MAGAZINE

ITEM QUANTITY
CONTAINERS - - - - - 300

INDICATES LOCATION OF HUMIDITY INDICATORS.

SEE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3.

SEE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

ISOMETRIC VIEW
(89'-0" MAGAZINE)

11'-8"
(APPROX)

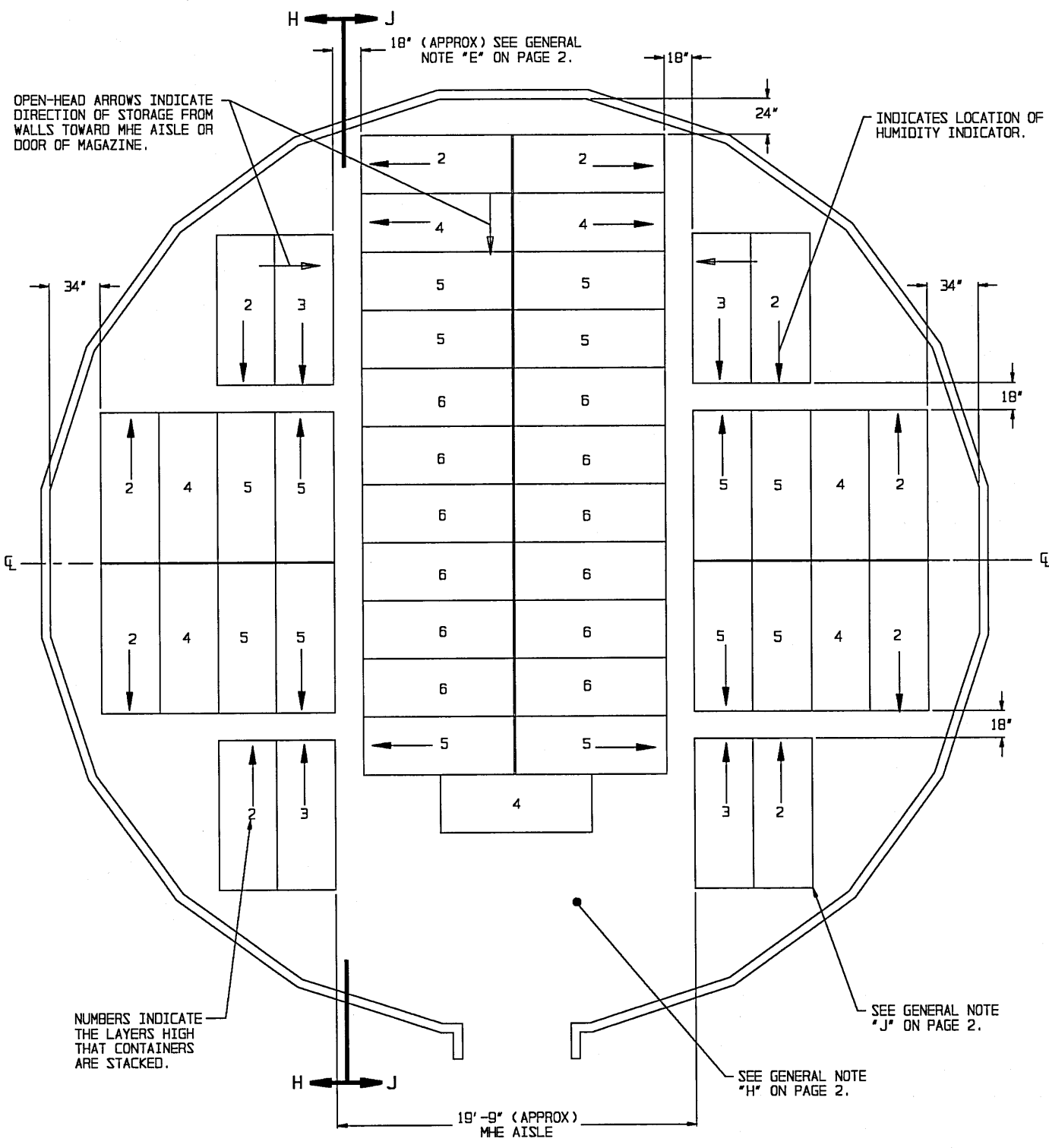
SEE GENERAL NOTE "H" ON PAGE 2.

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

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

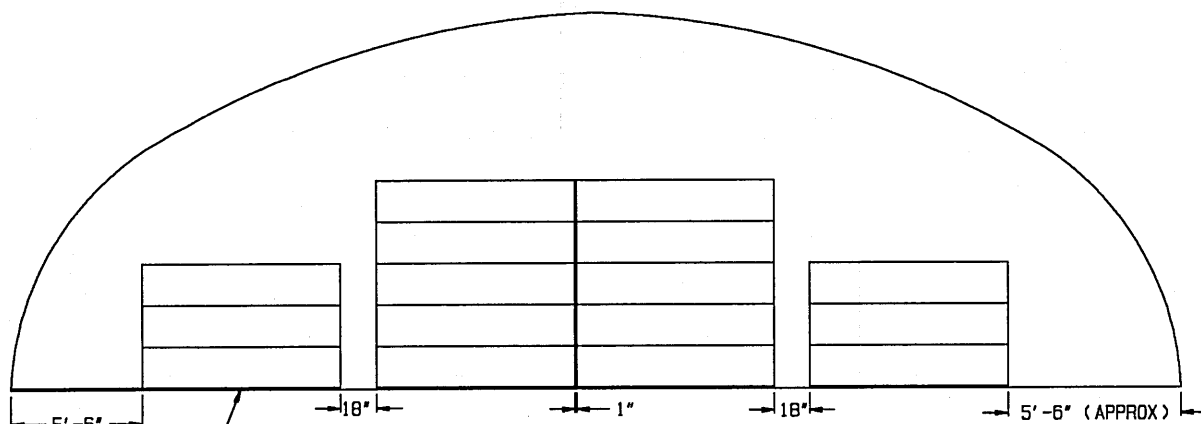
STORAGE IN 52'-0" DIA MAGAZINE

ITEM	QUANTITY
CONTAINERS	----- 202



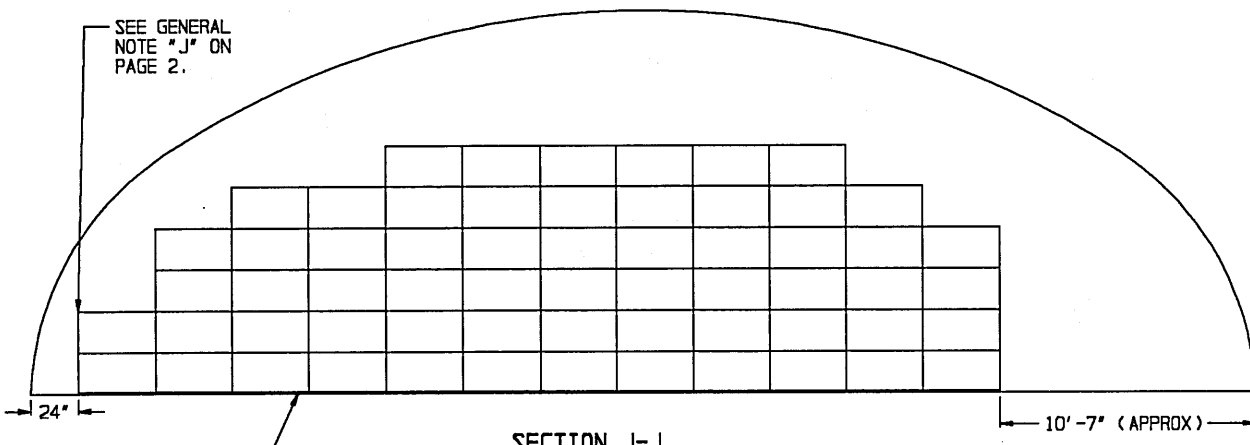
PLAN VIEW
(52'-0" DIA MAGAZINE)

STORAGE PROCEDURES IN 52'-0" DIA CORBETTA MAGAZINE



SECTION H-H

FLOOR DUNNAGE, 1" X 6"
X 38-3/4" (3 REOD PER
FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE
LOCATION A" DETAIL ON
PAGE 3 AND GENERAL
NOTE "G" ON PAGE 2.



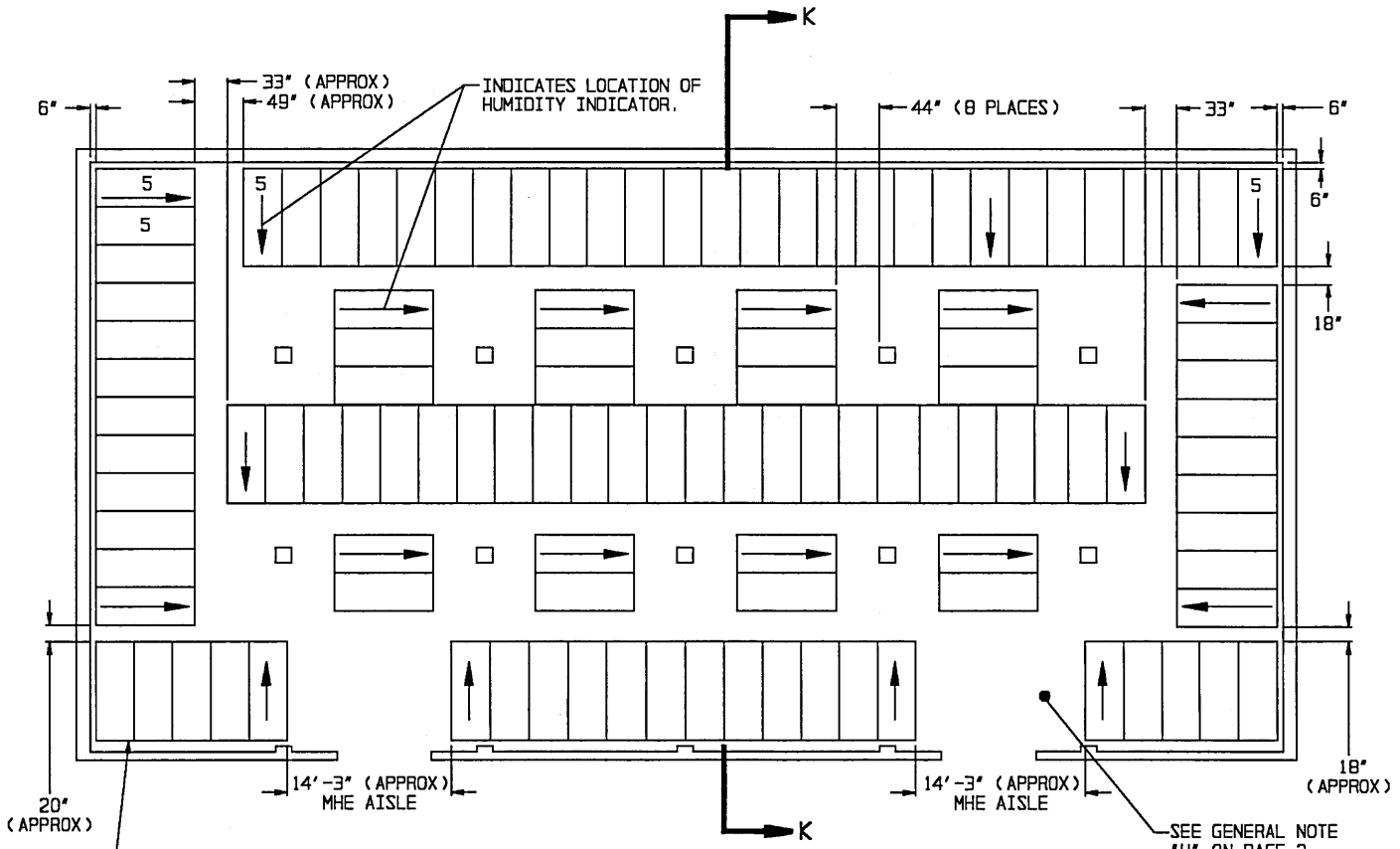
SECTION J-J

SEE GENERAL
NOTE "J" ON
PAGE 2.

FLOOR DUNNAGE, 1" X 6"
X 38-3/4" (3 REOD PER
FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE
LOCATION A" DETAIL ON
PAGE 3.

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

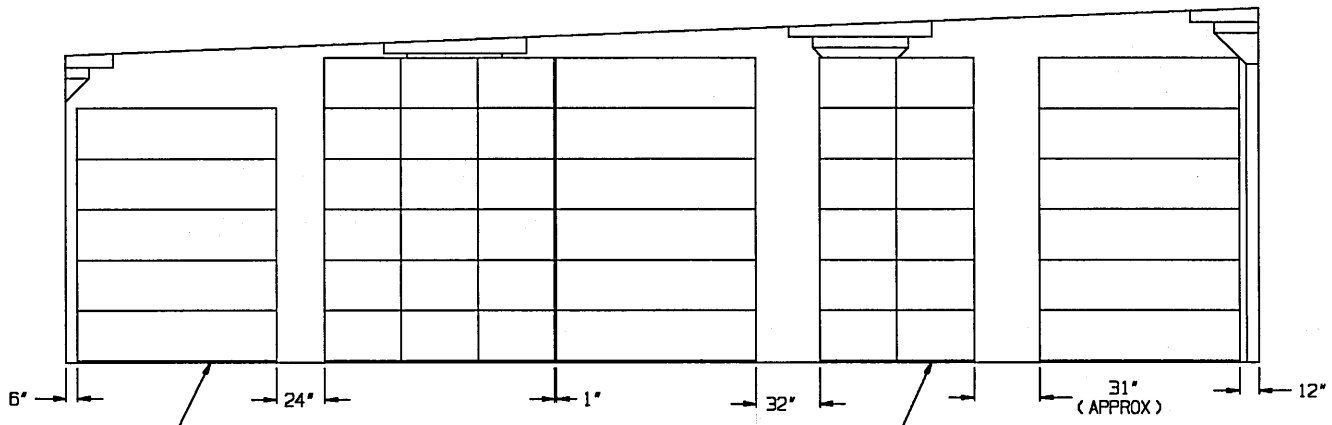
BILL OF MATERIAL (PER CONTAINER STACK)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	10	5



PLAN VIEW

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

CONTAINERS ARE ALL STACKED 6 LAYERS HIGH EXCEPT AS OTHERWISE NOTED.



SECTION K-K

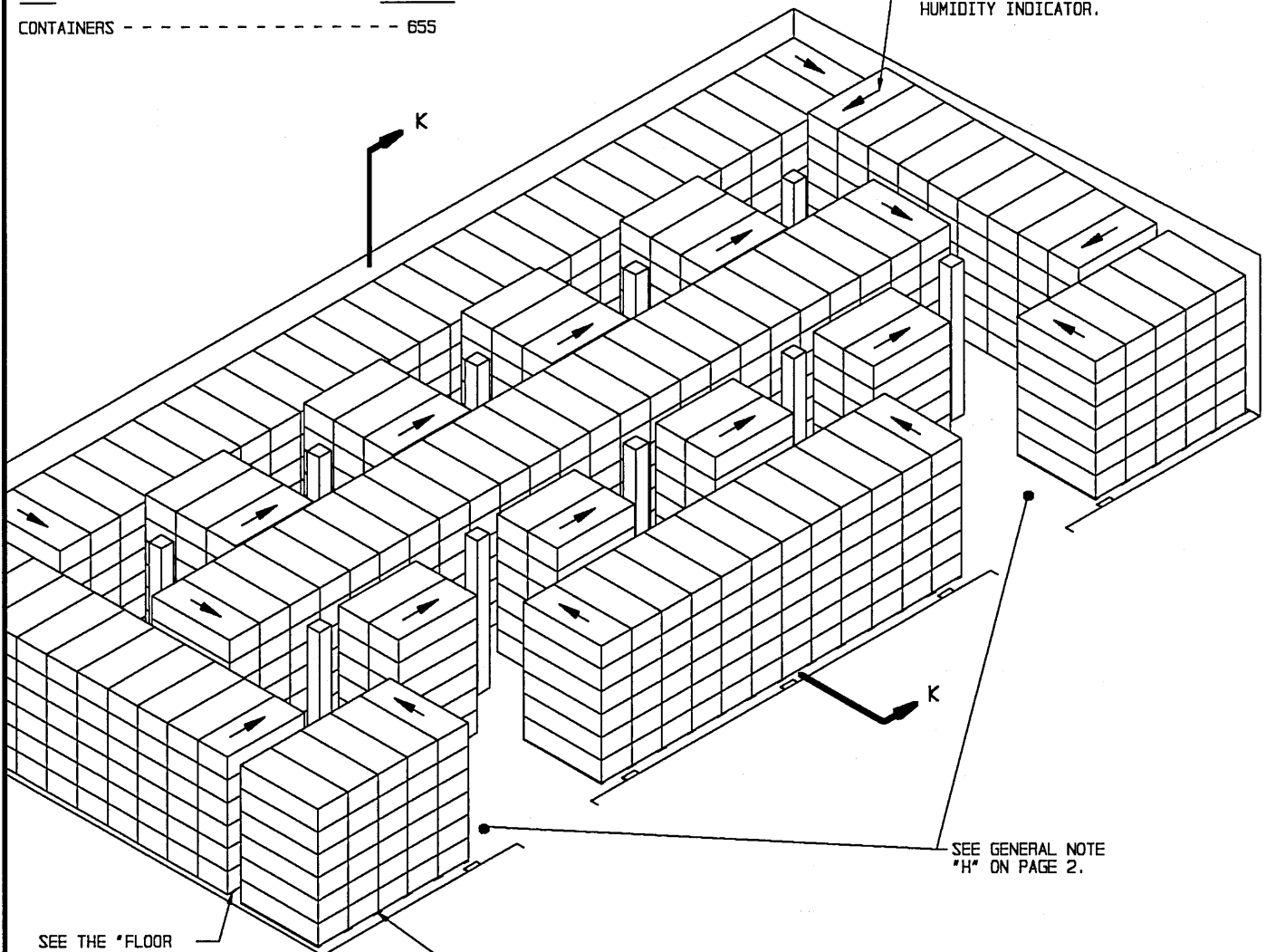
FLOOR DUNNAGE, 1" X 6" X 8'-0"
(2 REOD PER FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE LOCATION B"
DETAIL ON PAGE 3.

FLOOR DUNNAGE, 1" X 6" X 38-3/4"
(3 REOD PER FIRST-LAYER CONTAINER).
SEE THE "FLOOR DUNNAGE LOCATION A"
DETAIL ON PAGE 3 AND GENERAL NOTE "G"
ON PAGE 2.

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

ITEM QUANTITY
CONTAINERS - - - - - 655

INDICATES LOCATION OF HUMIDITY INDICATOR.



SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3.

SEE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

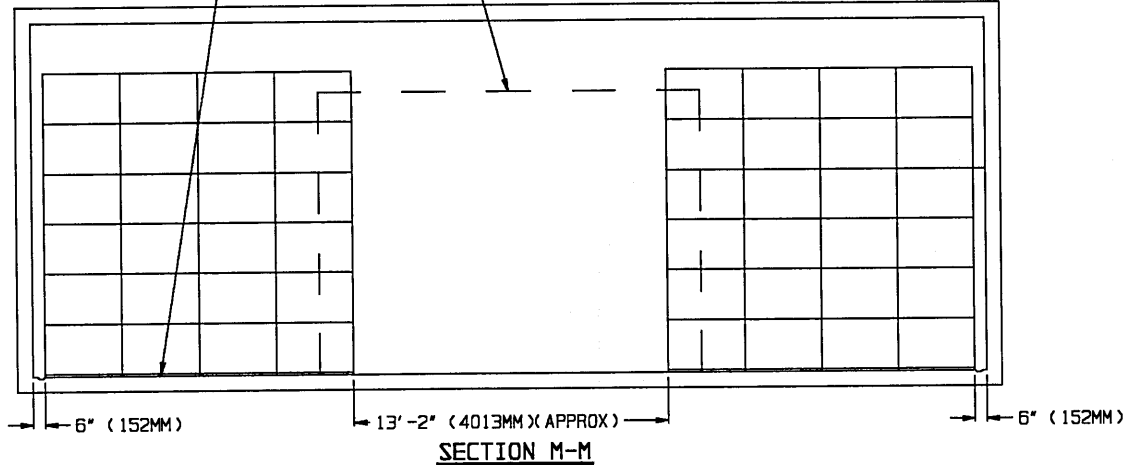
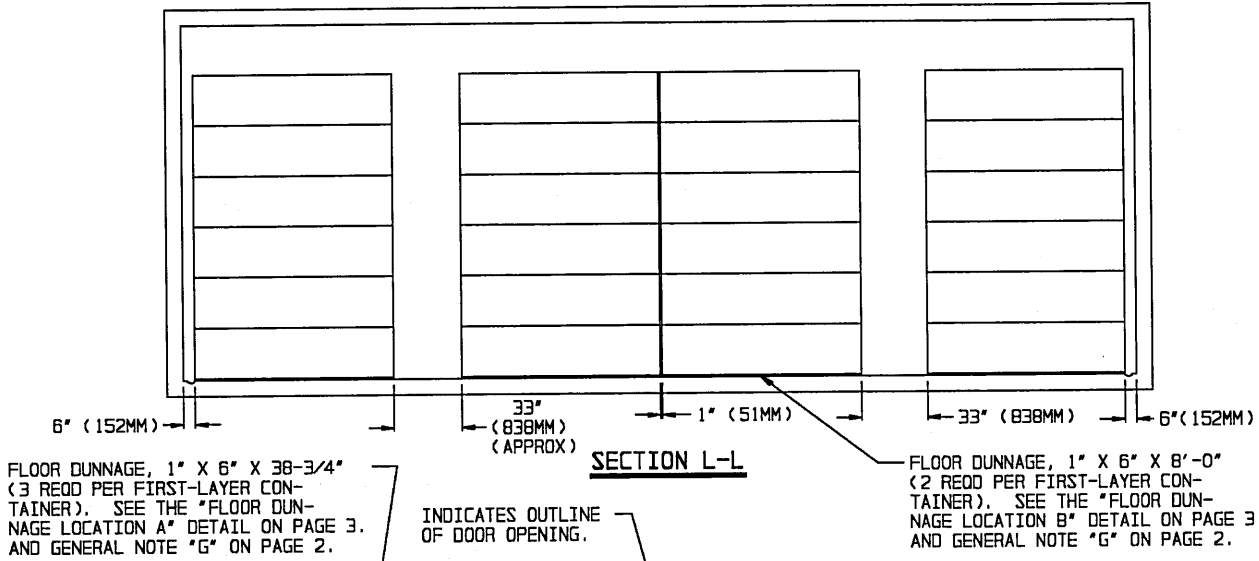
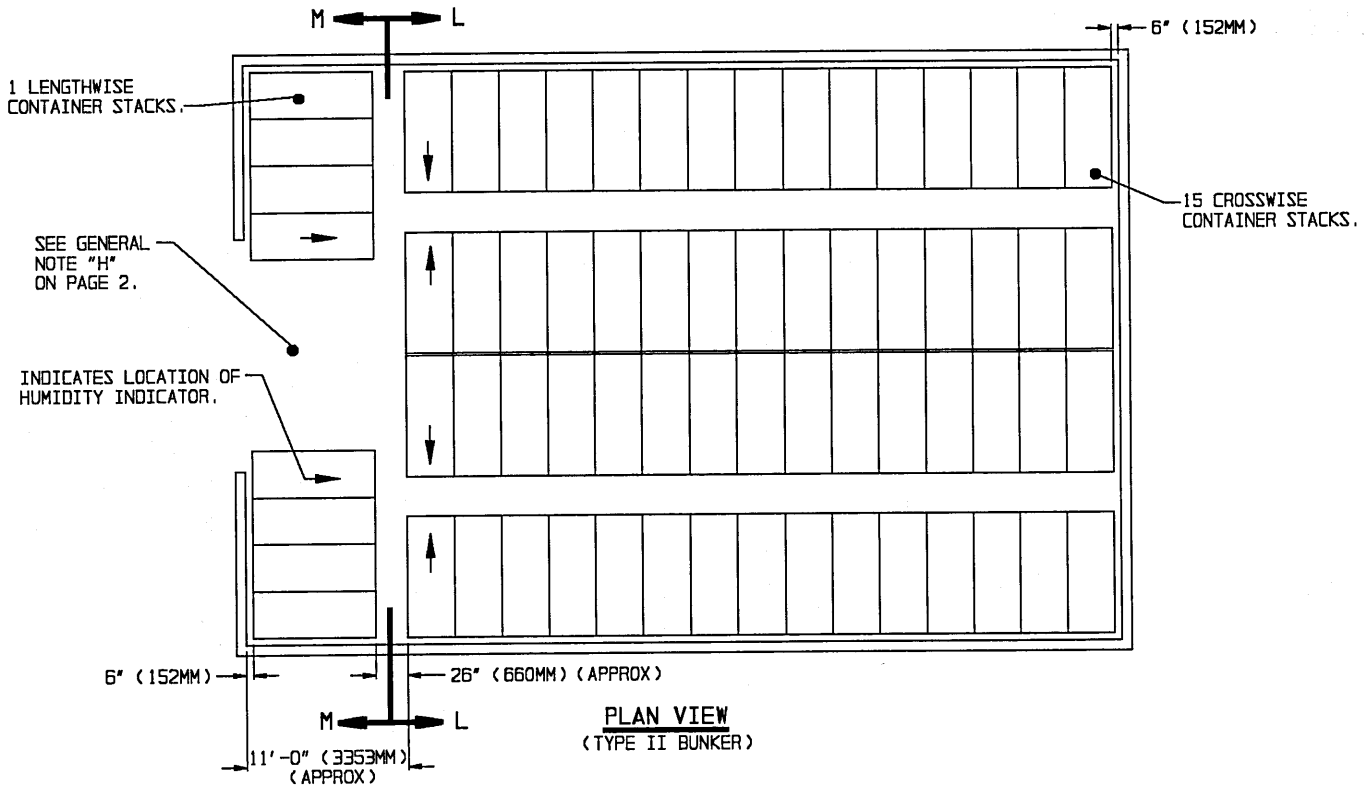
SEE GENERAL NOTE "H" ON PAGE 2.

ISOMETRIC VIEW

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

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

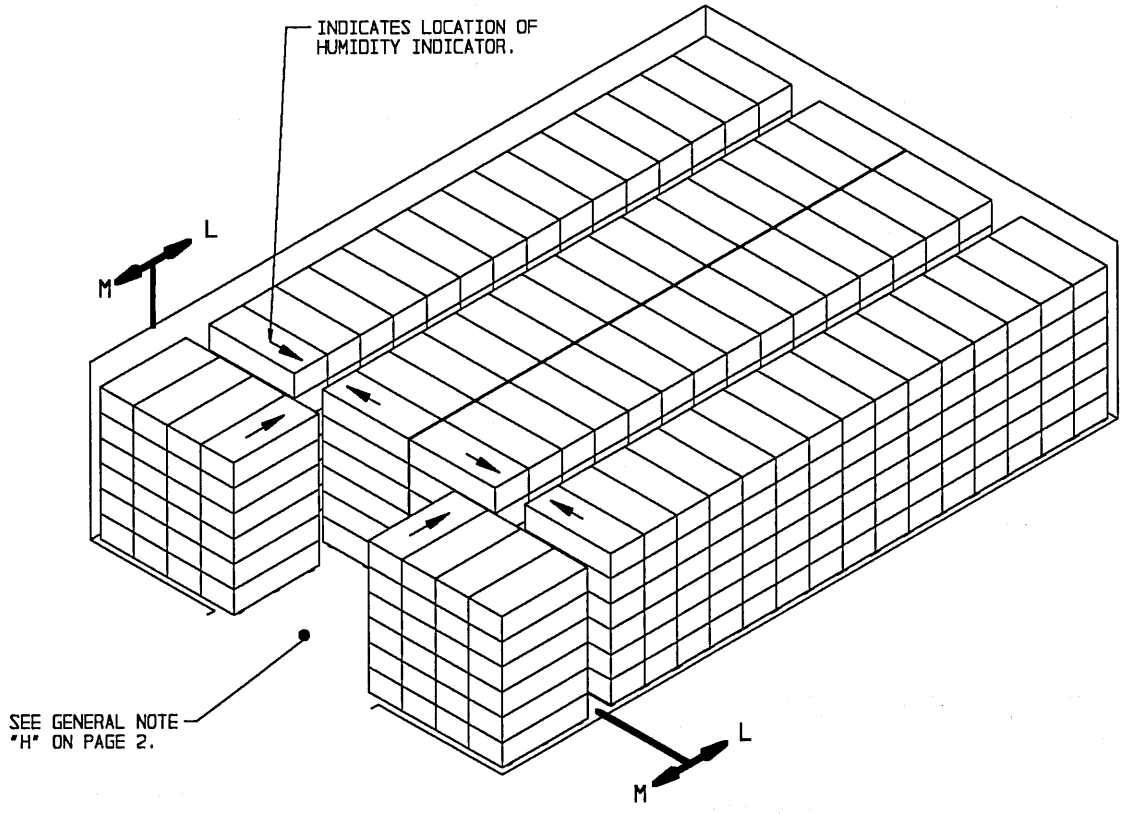
BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5



STORAGE PROCEDURES IN 60'-0" L X 40'-0" W X 15'-0" H TYPE II BUNKER

STORAGE IN TYPE II BUNKER MAGAZINE

ITEM QUANTITY
CONTAINERS ----- 408



SEE GENERAL NOTE "H" ON PAGE 2.

ISOMETRIC VIEW
(Type II BUNKER)

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

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5

6 LENGTHWISE
CONTAINER
STACKS.

18" (457MM) X 3 PLACES
SEE GENERAL NOTE "E"
ON PAGE 2.

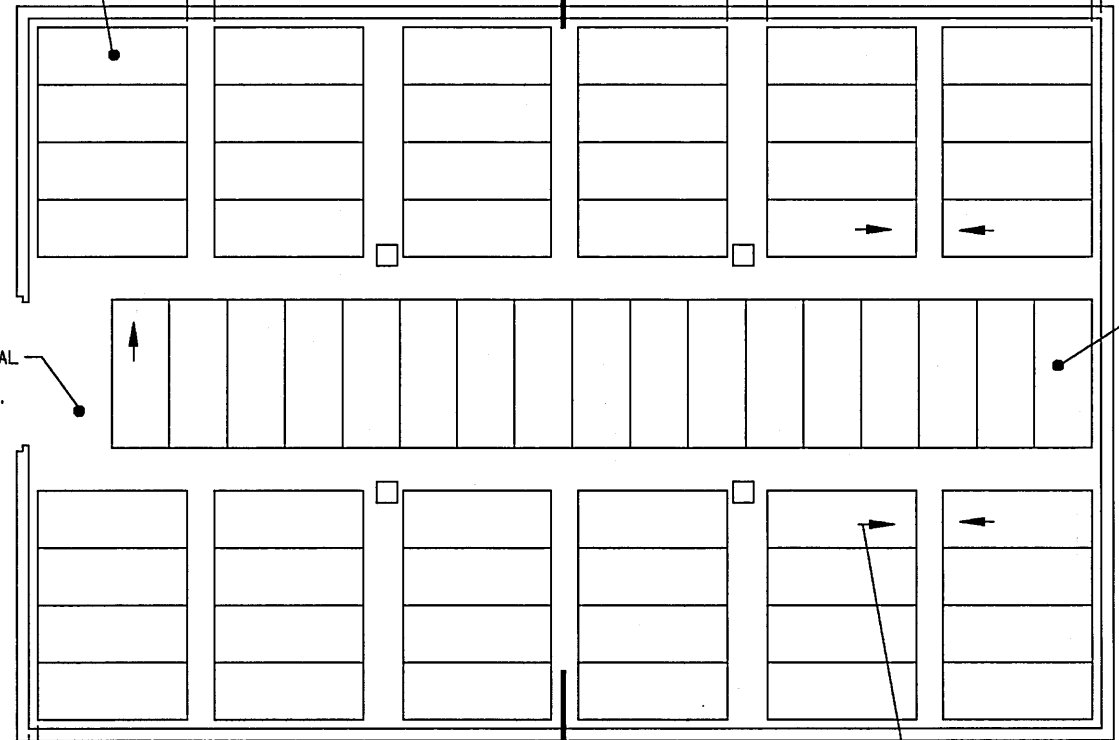
N

27" (685MM) X 2 PLACES

6" (152MM)

SEE GENERAL
NOTE "H"
ON PAGE 2.

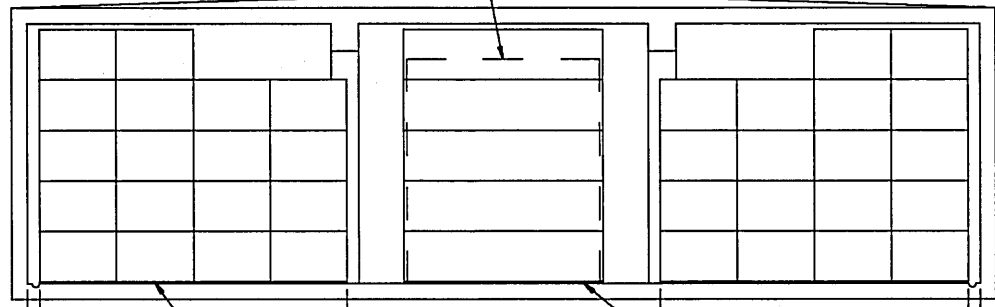
17 CROSSWISE
CONTAINER
STACKS.



PLAN VIEW
(TYPE III BUNKER)

INDICATES LOCATION OF
HUMIDITY INDICATOR.

INDICATES OUTLINE
OF DOOR OPENING.



6" (152MM)

13'-2" (4013MM) (APPROX)

6" (152MM)

FLOOR DUNNAGE, 1" X 6" X 38-3/4"
(3 REOD PER FIRST-LAYER CON-
TAINER). SEE THE "FLOOR DUN-
NAGE LOCATION A" DETAIL ON PAGE 3.
AND GENERAL NOTE "G" ON PAGE 2.

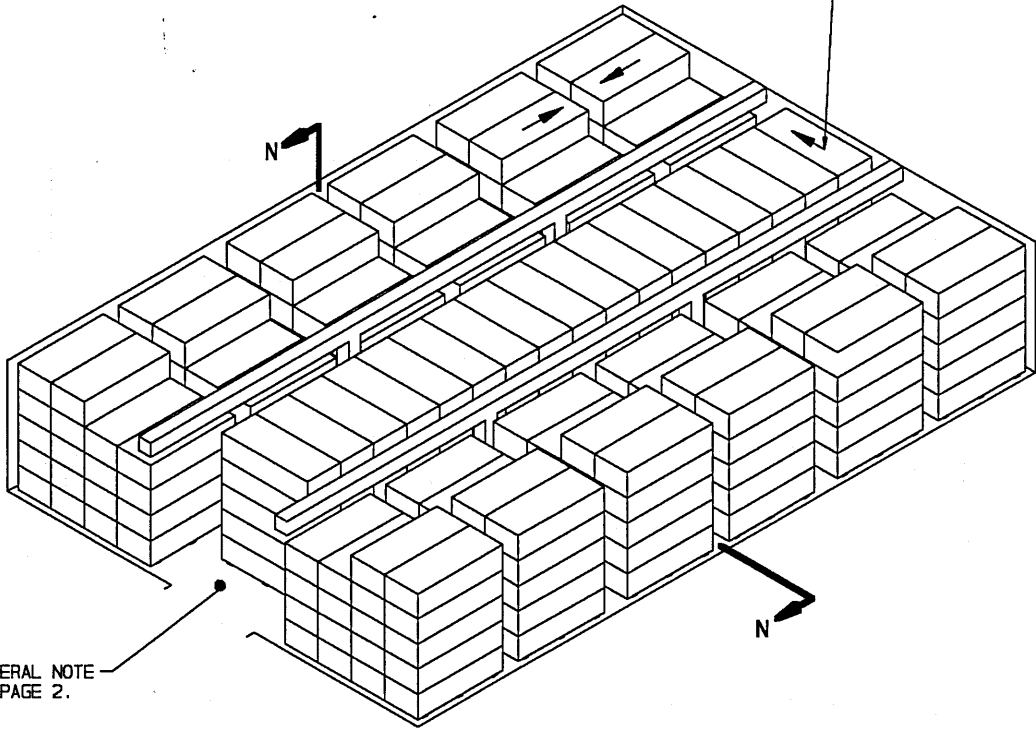
SECTION N-N

FLOOR DUNNAGE, 1" X 6" X 8'-0"
(2 REOD PER FIRST-LAYER CON-
TAINER). SEE THE "FLOOR DUN-
NAGE LOCATION B" DETAIL ON PAGE 3
AND GENERAL NOTE "G" ON PAGE 2.

STORAGE IN TYPE III BUNKER MAGAZINE

ITEM QUANTITY
CONTAINERS - - - - - 301

INDICATES LOCATION OF HUMIDITY INDICATOR.

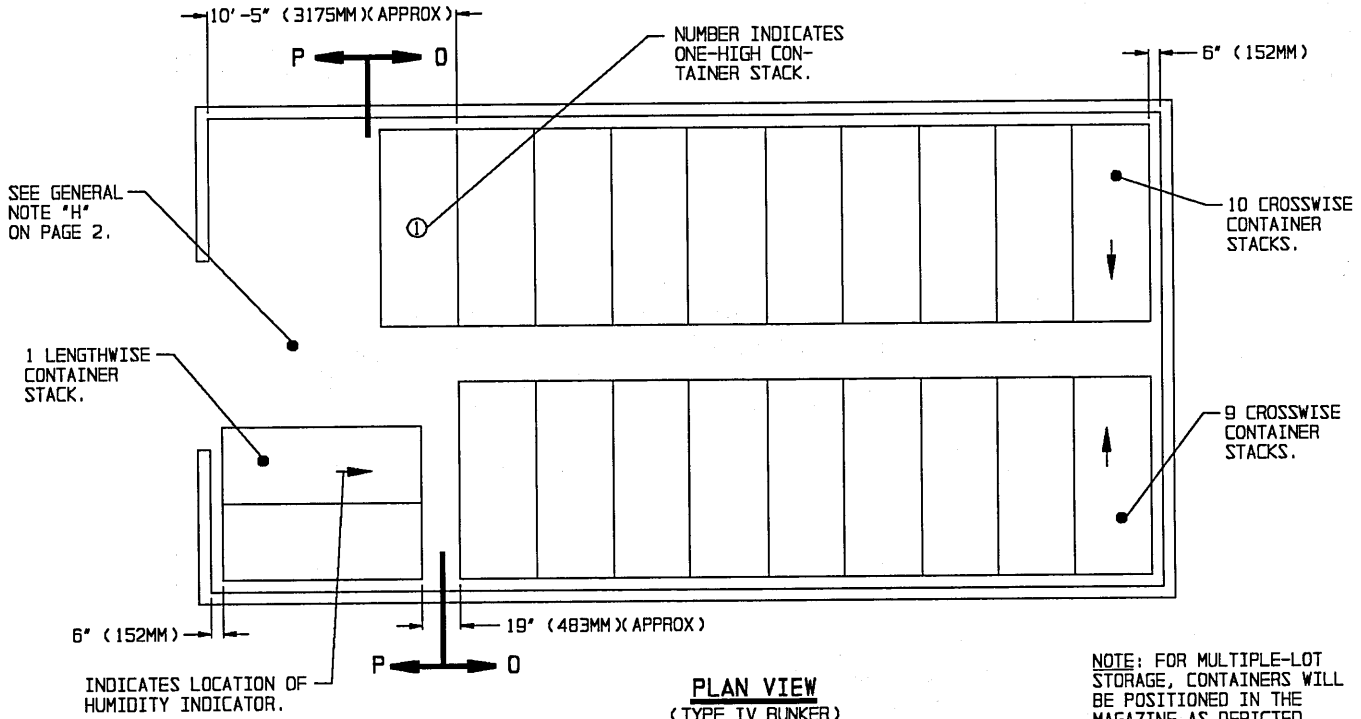


SEE GENERAL NOTE "H" ON PAGE 2.

ISOMETRIC VIEW
(Type III Bunker)

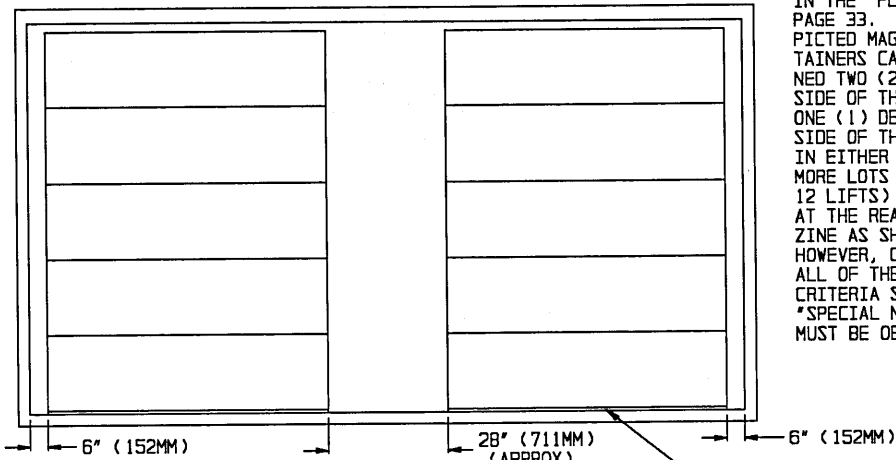
FOR "GENERAL NOTES", AND "MATERIAL SPECIFICATIONS" SEE PAGE 2.

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5



PLAN VIEW
(TYPE IV BUNKER)

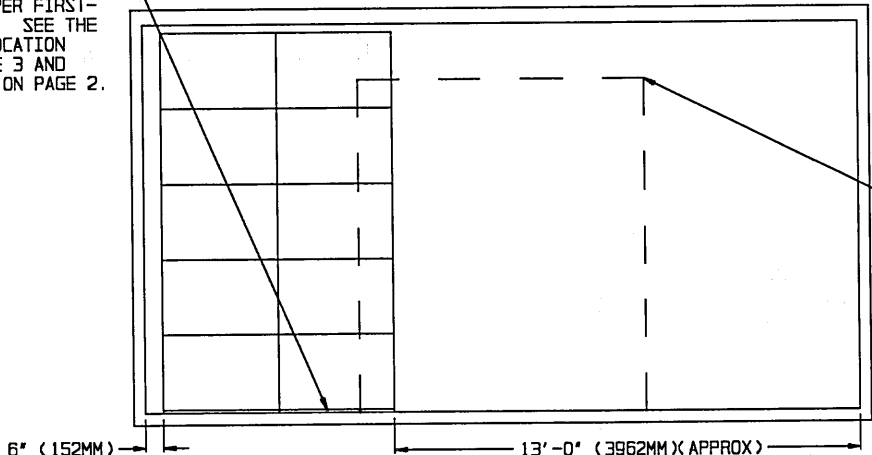
NOTE: FOR MULTIPLE-LOT STORAGE, CONTAINERS WILL BE POSITIONED IN THE MAGAZINE AS DEPICTED IN THE "PLAN VIEW" ON PAGE 33. FOR THE DEPICTED MAGAZINE, CONTAINERS CAN BE POSITIONED TWO (2) DEEP ON ONE SIDE OF THE MAGAZINE OR ONE (1) DEEP ON EACH SIDE OF THE MAGAZINE. IN EITHER CASE ONE OR MORE LOTS (NOT TO EXCEED 12 LIFTS) CAN BE STORED AT THE REAR OF THE MAGAZINE AS SHOWN ON PAGE 33. HOWEVER, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA SPECIFIED IN THE "SPECIAL NOTES" ON PAGE 33 MUST BE OBSERVED.



SECTION O-O

FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REQD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.

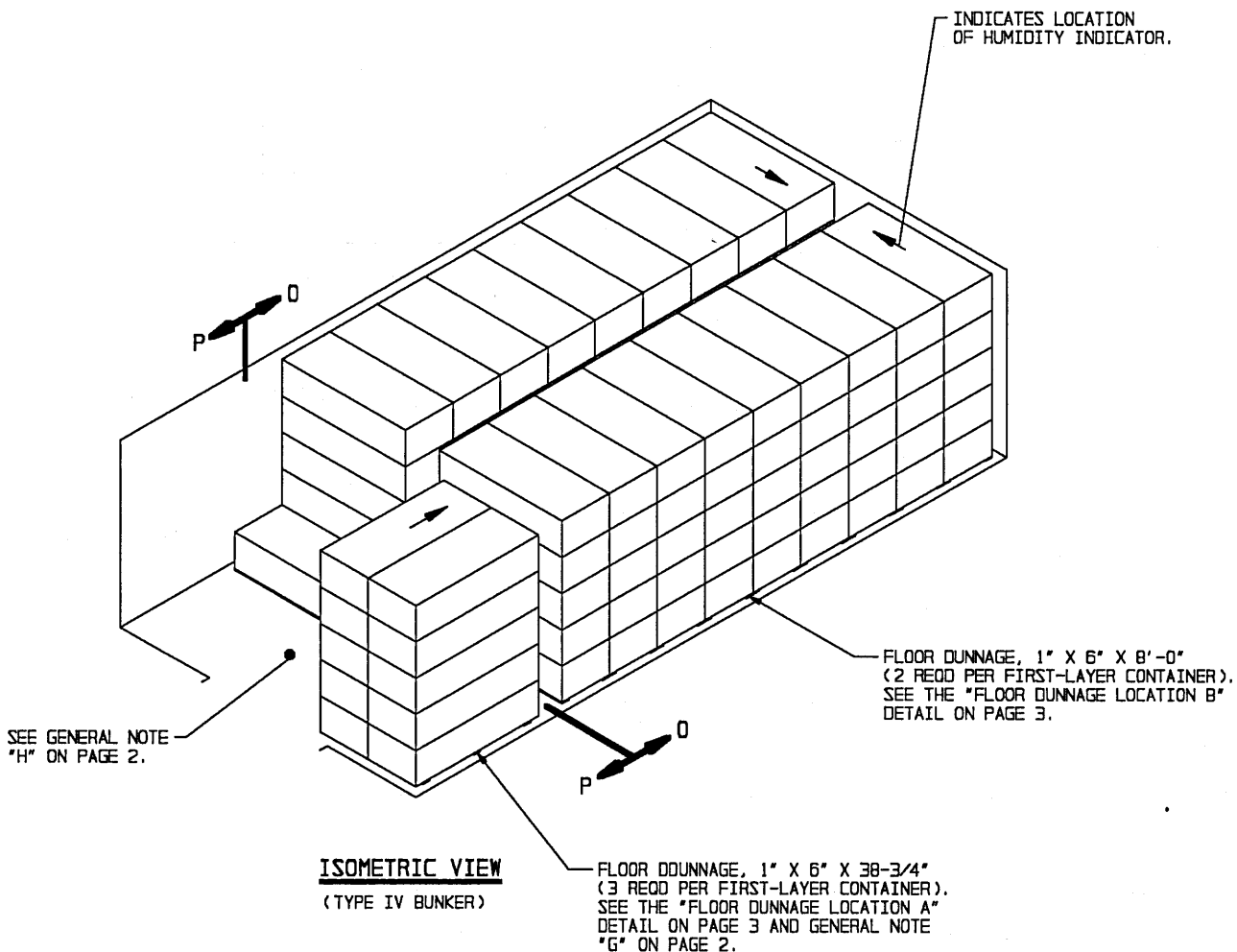


SECTION P-P

STORAGE PROCEDURES IN 40'-0" L X 20'-0" W X 11'-0" H TYPE IV BUNKER

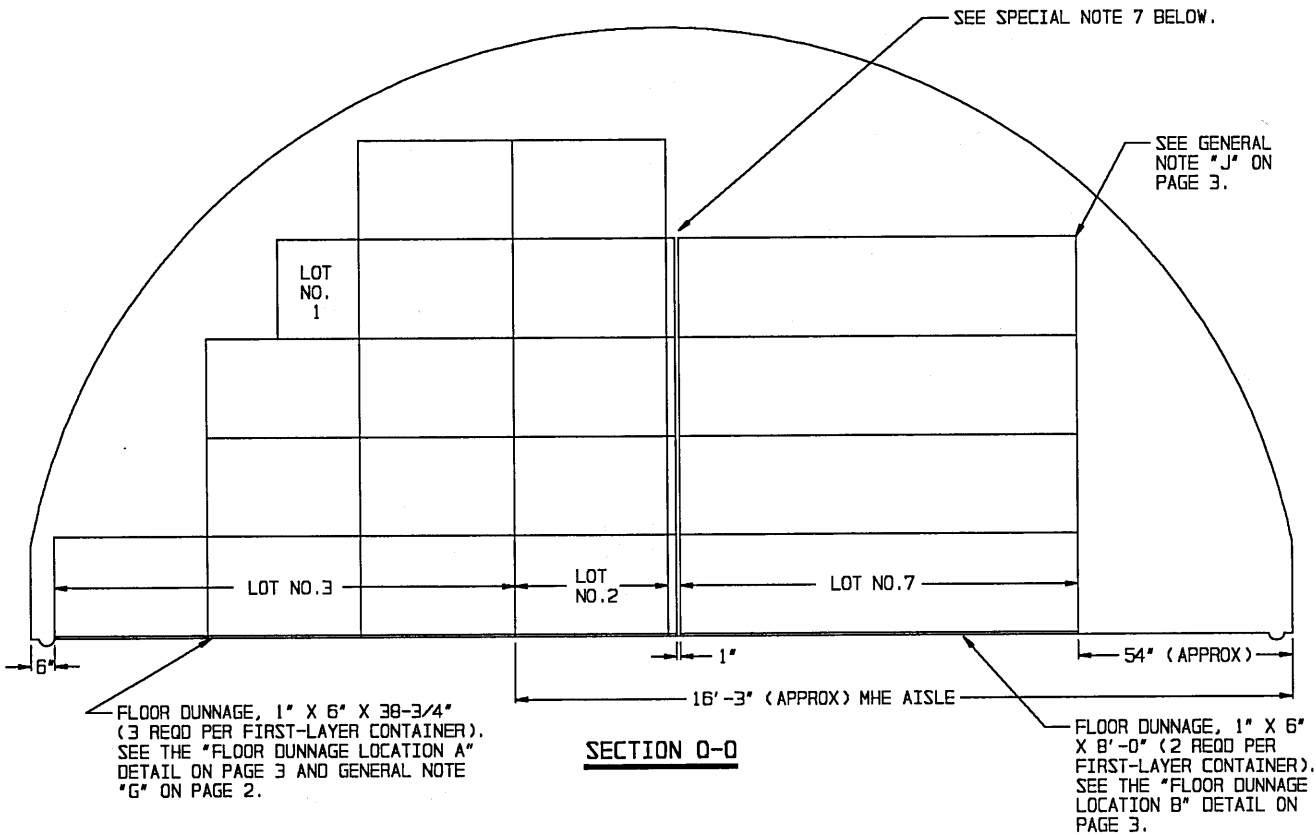
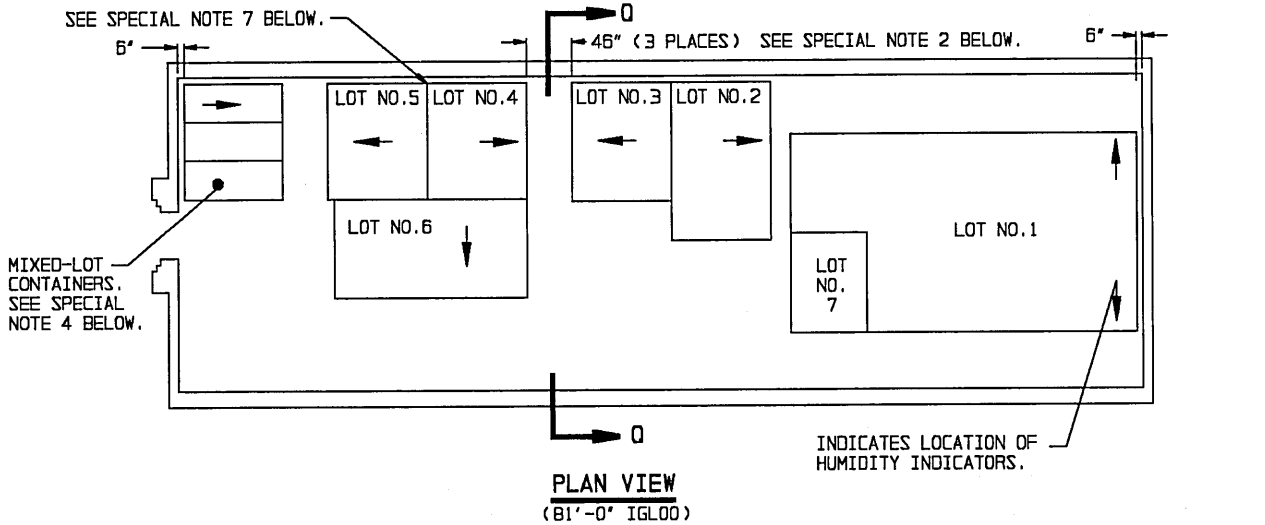
STORAGE IN TYPE IV BUNKER MAGAZINE

ITEM QUANTITY
CONTAINERS - - - - - 101



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

BILL OF MATERIAL (PER CONTAINER STACK)		
TYPE STACK	1" X 6" DUNNAGE LUMBER	
	LINEAR FEET	BOARD FEET
CROSSWISE	16	8
LENGTHWISE	10	5



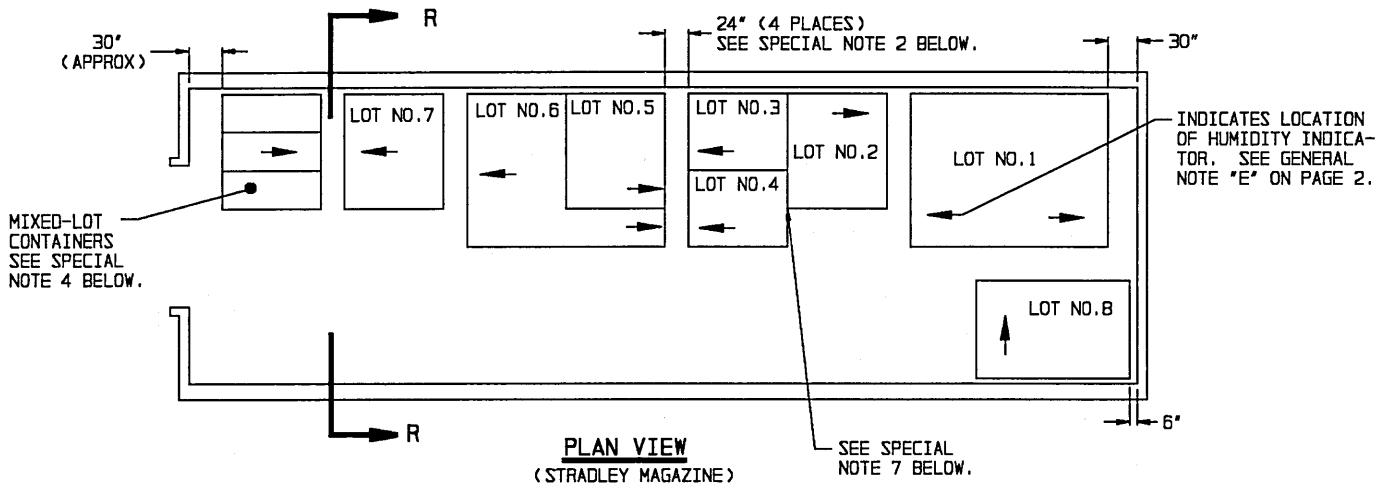
SPECIAL NOTES:

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
2. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE HANDLING EQUIPMENT. HOWEVER, AN 18" (MIN) INSPECTION AISLE MUST BE MAINTAINED FOR INSPECTION OF HUMIDITY INDICATORS.
3. GENERALLY THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.

(SPECIAL NOTES CONTINUED)

4. A MIXED-LOT CONTAINER WILL HAVE TWO ROUNDS OF DIFFERENT LOTS. BOTH ROUNDS MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. CONTAINERS OF A SINGLE-LOT OR MIXED-LOT CONTAINERS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT CONTAINERS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE CONTAINERS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
7. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.

(CONTINUED AT RIGHT)



PLAN VIEW
(STRADLEY MAGAZINE)

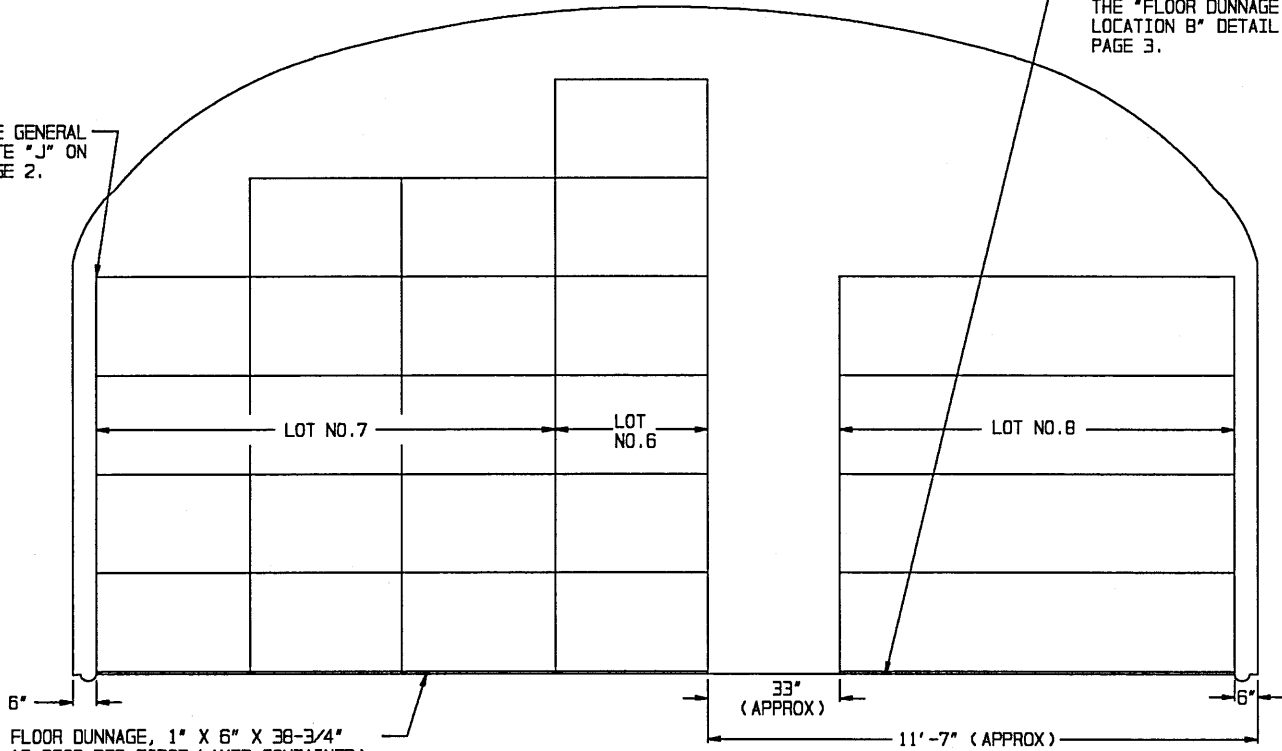
MIXED-LOT CONTAINERS
SEE SPECIAL NOTE 4 BELOW.

INDICATES LOCATION OF HUMIDITY INDICATOR. SEE GENERAL NOTE "E" ON PAGE 2.

SEE SPECIAL NOTE 7 BELOW.

SEE GENERAL NOTE "J" ON PAGE 2.

FLOOR DUNNAGE, 1" X 6" X 8'-0" (2 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION B" DETAIL ON PAGE 3.



SECTION R-R

FLOOR DUNNAGE, 1" X 6" X 38-3/4" (3 REOD PER FIRST-LAYER CONTAINER). SEE THE "FLOOR DUNNAGE LOCATION A" DETAIL ON PAGE 3 AND GENERAL NOTE "G" ON PAGE 2.

SPECIAL NOTES:

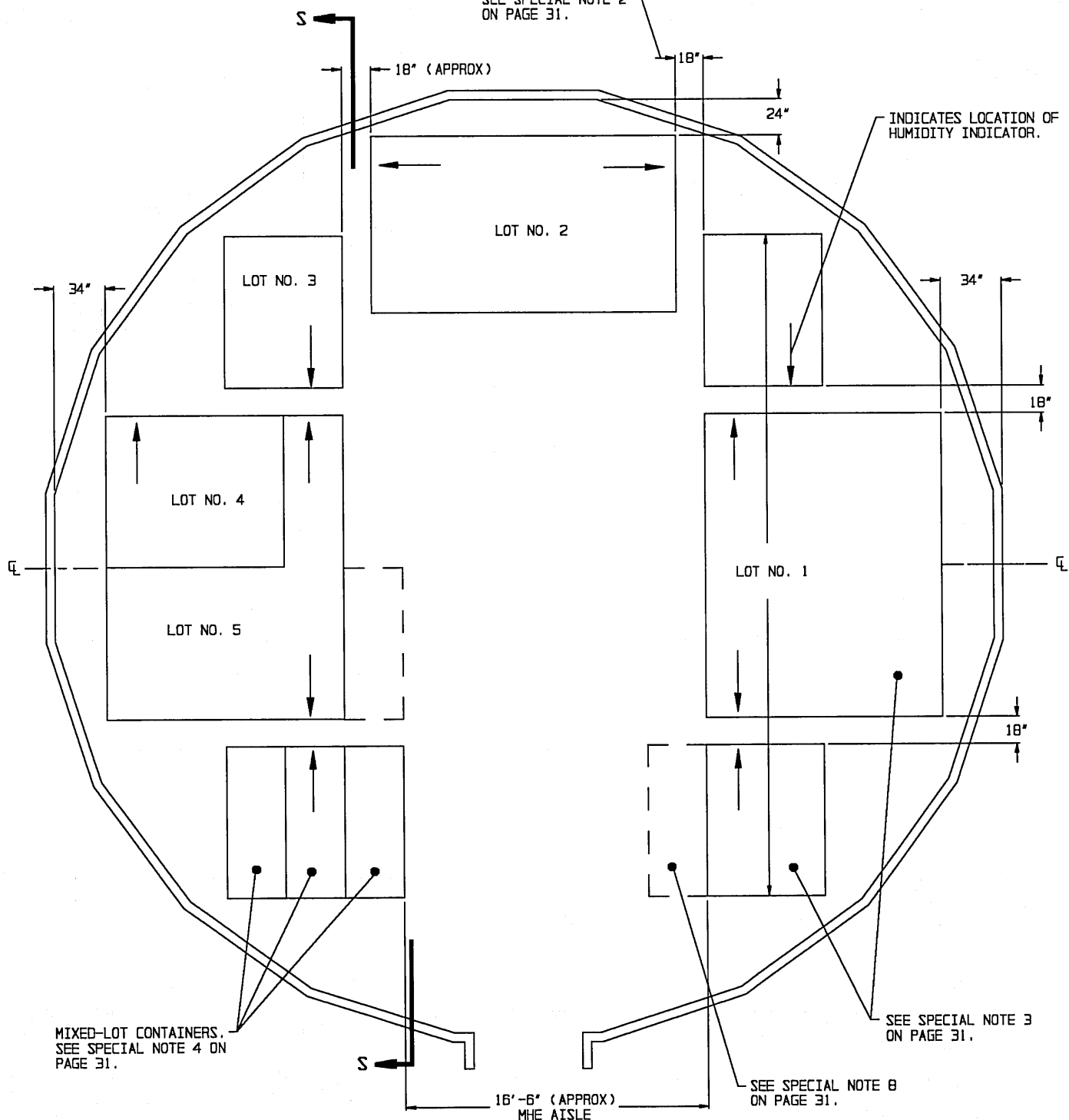
(SPECIAL NOTES CONTINUED)

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
2. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE HANDLING EQUIPMENT. HOWEVER, AN 18" (MIN) INSPECTION AISLE MUST BE MAINTAINED FOR INSPECTION OF HUMIDITY INDICATORS.
3. GENERALLY, THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED ON ONE SIDE OF THE MAGAZINE, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND THE GENERAL NOTES ON PAGE 2.
4. A MIXED-LOT CONTAINER WILL HAVE TWO ROUNDS OF DIFFERENT LOTS. BOTH ROUNDS MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. CONTAINERS OF A SINGLE-LOT OR MIXED-LOT CONTAINERS ARE CONSIDERED "ACCESSIBLE" IF NOT MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT CONTAINERS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE CONTAINERS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE SIDEWALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
7. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.

(CONTINUED AT RIGHT)

TYPICAL MULTIPLE-LOT STORAGE IN STRADLEY AND OVAL ARCH TYPE MAGAZINES

SEE SPECIAL NOTE 2
ON PAGE 31.



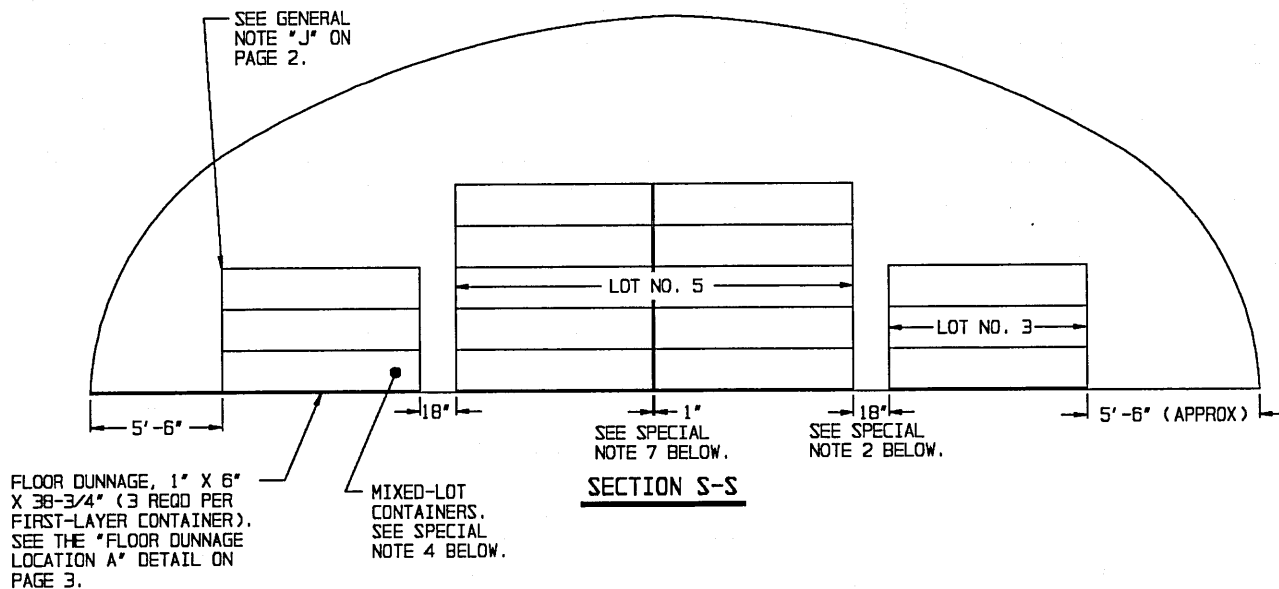
INDICATES LOCATION OF
HUMIDITY INDICATOR.

MIXED-LOT CONTAINERS.
SEE SPECIAL NOTE 4 ON
PAGE 31.

SEE SPECIAL NOTE 3
ON PAGE 31.

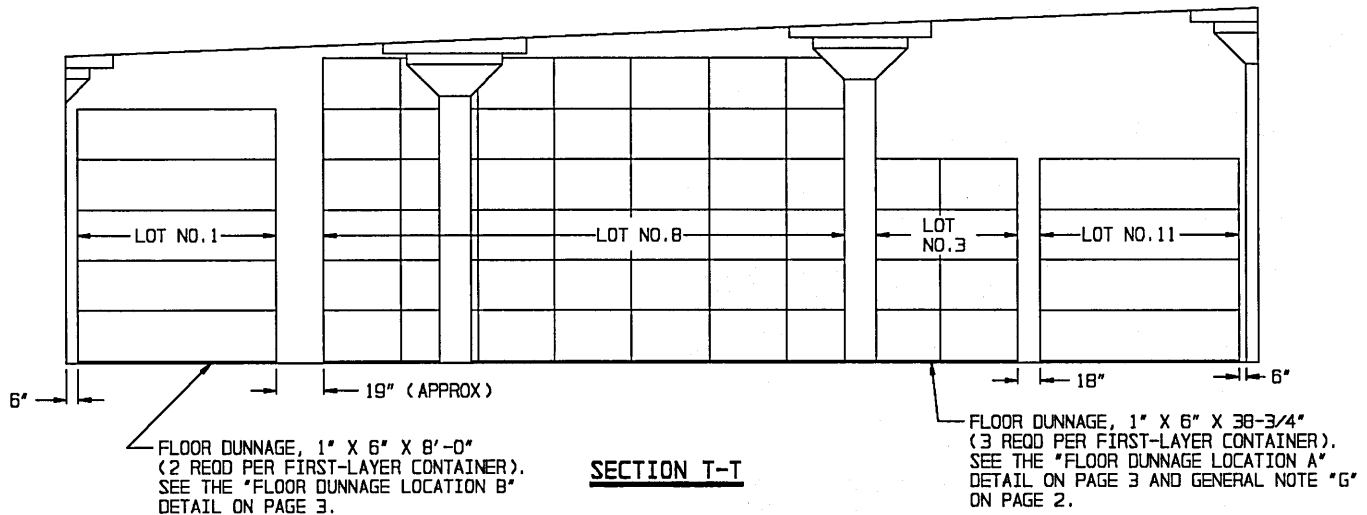
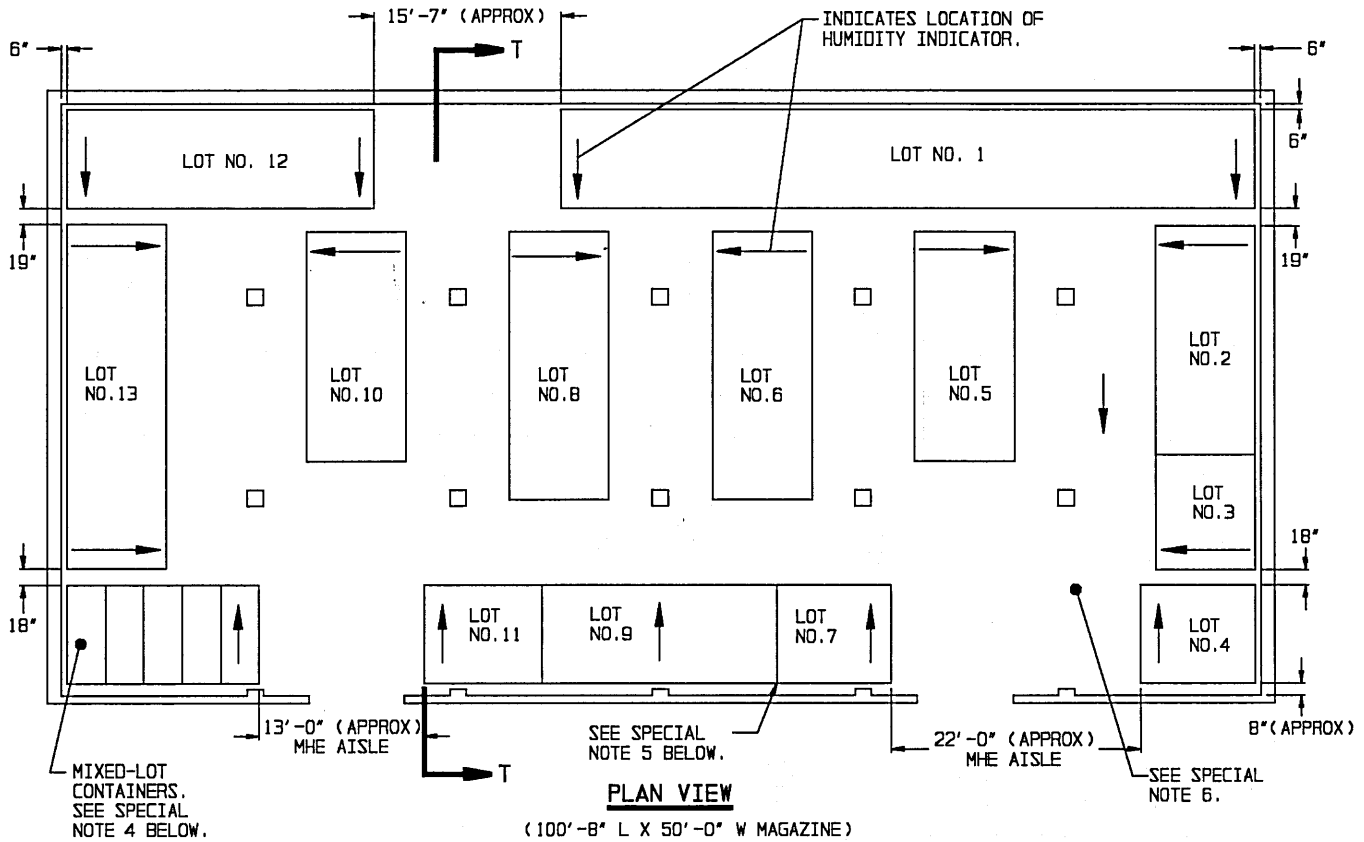
SEE SPECIAL NOTE 8
ON PAGE 31.

PLAN VIEW
(52'-0" DIA MAGAZINE)



SPECIAL NOTES:

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE AND ON PAGE 30 ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
2. AN INSPECTION/INVENTORY AISLE NOT LESS THAN 18" WIDE MUST BE PROVIDED FOR INSPECTION OF HUMIDITY INDICATORS.
3. GENERALLY, THE LARGEST LOT SHOULD BE STORED ON ONE SIDE OF THE MAGAZINE. HOWEVER, BOTH SIDES MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING ROWS SIMILAR TO THOSE SHOWN ON THE LEFT SIDE. EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.
4. A MIXED-LOT CONTAINER WILL HAVE TWO ROUNDS OF DIFFERENT LOTS. BOTH ROUNDS MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. CONTAINERS OF A SINGLE-LOT OR MIXED-LOT CONTAINERS ARE CONSIDERED "ACCESSIBLE" IF NOT MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT CONTAINERS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE CONTAINERS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. FOR STORAGE OF MULTIPLE LOTS, THE DISTANCE FROM THE WALL WILL BE BASED ON THE OVERHEAD CLEARANCE REQUIRED FOR MHE.
7. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
8. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. FOR THE "ADDITIONAL STORAGE LOCATIONS" (SHOWN BY DOTTED LINES), ADEQUATE SPACE FOR THE MHE OPERATION MUST BE MADE AVAILABLE. ALSO, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.



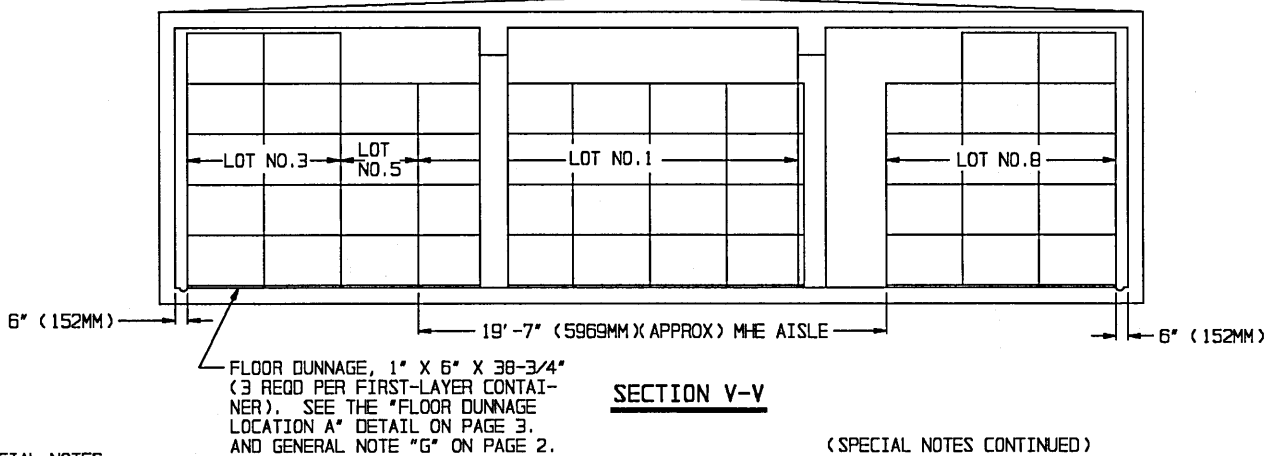
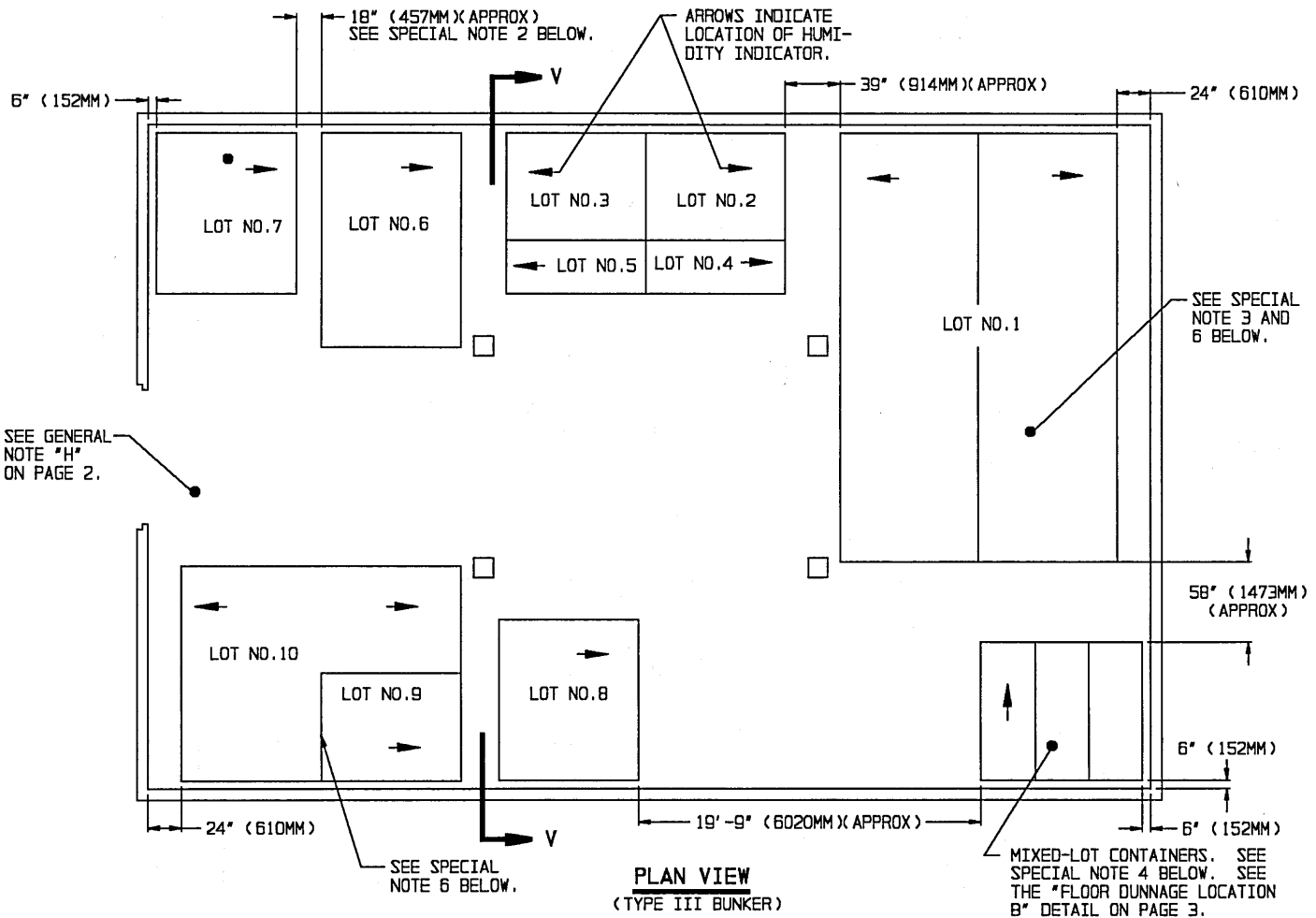
SPECIAL NOTES:

1. THE STORAGE PLANS SHOWN ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO BE STORED IN MAGAZINE REQUIRE.
2. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE HANDLING EQUIPMENT. HOWEVER, AN 18" (MIN) INSPECTION AISLE MUST BE MAINTAINED FOR INSPECTION OF HUMIDITY INDICATORS.
3. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. CONTAINERS OF A SINGLE-LOT OR MIXED-LOT CONTAINERS ARE CONSIDERED "ACCESSIBLE" IF NOT MORE THAN TWENTY-FOUR (24) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT CONTAINERS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE CONTAINERS, PROVIDING THE CAPACITY OF THE MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.

(CONTINUED AT RIGHT)

(SPECIAL NOTES CONTINUED)

4. A MIXED-LOT CONTAINER WILL HAVE TWO ROUNDS OF DIFFERENT LOTS. BOTH ROUNDS MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.
6. THE MHE AISLE MAY BE USED TO STORE ONE OR MORE STACKS OF ADDITIONAL LOTS OR ADDITIONAL ITEMS THAT ARE FROM A LOT ADJACENT TO THE MHE AISLE. HOWEVER, COMPLIANCE WITH ALL OF THE MULTIPLE-LOT CRITERIA AS SET FORTH ON THIS PAGE MUST BE OBSERVED.



SPECIAL NOTES:

1. THE STORAGE PLANS AND CONFIGURATIONS SHOWN ON THIS PAGE ARE TYPICAL ONLY. ADAPTATIONS MAY BE MADE AS NUMBER AND SIZES OF LOTS TO STORED IN MAGAZINE REQUIRE.
2. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE HANDLING EQUIPMENT. HOWEVER, AN 18" (MIN) INSPECTION AISLE MUST BE MAINTAINED FOR INSPECTION OF HUMIDITY INDICATORS.
3. GENERALLY THE LARGEST LOT SHOULD BE STORED IN THE REAR OF THE MAGAZINE. HOWEVER, THE REAR AREA MAY BE USED TO STORE MORE THAN ONE LOT BY ERECTING STACKS SIMILAR TO THOSE SHOWN IN THE FRONTAL AREA. AN MHE AISLE WILL BE REQUIRED, AND EACH LOT MUST BE ACCESSIBLE FOR REMOVAL AND INSPECTION/INVENTORY IN ACCORDANCE WITH OTHER CRITERIA SPECIFIED IN THESE SPECIAL NOTES AND IN THE GENERAL NOTES ON PAGE 2.

(SPECIAL NOTES CONTINUED)

4. A MIXED-LOT CONTAINER WILL HAVE TWO ROUNDS OF DIFFERENT LOTS. BOTH ROUNDS MUST HAVE THE SAME NATIONAL STOCK NUMBER AND CONDITION CODE.
5. EACH LOT WITHIN THE MAGAZINE MUST BE ACCESSIBLE FOR MOVEMENT BY MHE. CONTAINERS OF A SINGLE-LOT OR MIXED-LOT CONTAINERS ARE CONSIDERED "ACCESSIBLE" IF NO MORE THAN TWELVE (12) "LIFTS" OF ANOTHER LOT OR LOTS HAVE TO BE MADE TO GAIN ACCESS TO THE SINGLE-LOT OR MIXED-LOT CONTAINERS. A "LIFT" MAY CONSIST OF ONE (1) OR MORE CONTAINERS, PROVIDING THE CAPACITY OF MHE PERMITS, AND SAFE HANDLING IS NOT JEOPARDIZED.
6. WHEN TWO LOTS ARE STORED ADJACENT TO EACH OTHER, THEY SHOULD BE SEPARATED BY AT LEAST 1" TO PROVIDE CLEARANCE FOR REMOVAL OF EITHER LOT.

(CONTINUED AT RIGHT)