CHANGE

AC NO: 150/5345-42A CHG 1
DATE: November 14, 1975

ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

TAD-49

SUBJECT: CHANGE 1 TO ADVISORY CIRCULAR 150/5345-42A, FAA SPECIFICATION L-857, AIRPORT LIGHT BASES, TRANSFORMER HOUSINGS, AND JUNCTION BOXES

1. PURPOSE. This change transmits page changes to the basic advisory circular.

2. EXPLANATION OF CHANGES. The requirements for protective coating of certain parts of type II bases and junction boxes have been changed and the outside diameter of the top flange rings of bottom and middle sections of multiple section type II bases has been revised. Asterisks in the margins denote change in the text.

3. HOW TO OBTAIN THIS CHANGE. Obtain additional copies of Change 1 to AC 150/5345-42A, FAA Specification L-857, Airport Light Bases, Transformer Housings, and Junction Boxes, free of charge from the Department of Transportation, Publications Section, TAD-443.1, Washington, D.C. 20590.

4. PAGE CONTROL CHART.

Remove Pages	Dated	Insert Pages	Dated
Pages 7 and 8	10/4/73	Page 7	11/14/75
		Page 8	10/4/73
Appendix 1		Appendix 1	
Pages 3 and 4	10/4/73	Page 3	10/4/73
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Initiated by: AAS-550

4.2.7 Junction Box and Extensions. The junction box, extension, and cover shall be fabricated as shown in Figures 6 and 7 of this specification. The junction box and extension shall be fabricated of suitable ferrous materials necessary to meet the test requirements of paragraph 5. The dimensions of the junction box and junction box extension shall be as shown in Figures 6 and 7. Openings in the junction box, along with the rubber grommets in these openings, shall be as shown in Figures 6 and 7; or if required, threaded hubs may be supplied. Sharp edges, on the inside of the body, where the entrance hubs meet the inside surface of the body or bottom, shall be broken or ground down prior to galvanizing to eliminate cutting of cable insulation at these points.

4.2.8 Shipping and Installation Cover. A protective shipping cover for bases and extensions, bolted to all six tapped bolt holes of the top flange, shall be supplied to provide protection during shipment and installation. The cover shall be made of material equal to 3/4-inch thick exterior grade plywood in strength and weather resistance. The shipping cover shall be 3/4-inch thick and 3/8-inch larger than the flange diameter (maximum). The edges of the shipping cover and part of the top and bottom surface shall be coated with a uniform thickness of paraffin wax. A polyethylene gasket of three mils thickness shall be used for shipping and installation. The junction box and junction box extension will be suitably packaged for protection in shipping.

4.2.9 Cover Plates. Cover plates shall be fabricated from a suitable ferrous material necessary to meet the test requirements in paragraph 5. The dimensions of cover plates shall conform to Figure 3 of this specification.

4.2.10 Protective Coating. After fabrication, burrs and sharp edges shall be removed and all parts coated for corrosion protection. Mud plates, flange rings, spacer rings, and conversion rings shall be plated with zinc in accordance with the requirements of Federal Specification QQ-Z-325, class 2, type I or cadmium in accordance with the requirement of Federal Specification QQ-P-416, class 2, type I. All parts of bases, junction boxes, and extensions not listed above shall be hot-dipped galvanized in accordance with ASTM A-385. Minimum weight of galvanize coating shall be in accordance with ASTM A-386, class A (1.862 ounces per square foot). All tapping operations shall be performed after protective coating is applied and all tapped holes shall be protected by polyurethane varnish. Touch-up of damaged protective coating shall not exceed 10 percent of the total area. Touch-up material shall be zinc dust primer conforming to the requirements of Military Specification MIL-P-26915. *

4.2.11 Protective Painting. After protective plating to the top section of the bases and extensions, any welding to lower sections or flanges shall be given one coat of zinc dust primer complying to MIL-P-26915 (USAF). All

inside surfaces of the top section of the bases and extensions, and junction boxes and junction box extensions shall be given one coat of zinc dust primer complying to MIL-P-26915 (USAF). This includes the underside of the top flanges.

4.2.12 Grounding Lug. If specified, a steel lug shall be welded to the interior or exterior wall of each light base, light base extension, junction box, or junction box extension before protective coating is applied as shown in Figure 4. The location may vary to meet specific conditions. A bronze or copper ground connector shall be fastened to the steel lug after coating.

4.2.13 Drain Hole. If specified, a drain hole shall be provided in the bottom of the base. The drain hole shall be 1/2-inch minimum diameter for drainage purpose only. A coupling, 3/4-inch minimum diameter, shall be welded flush to the bottom surface and shall not extend into the base if a drain pipe or threaded plug is specified.

4.2.14 Construction Rings. Construction rings shall be fabricated from a suitable ferrous material necessary to meet the test requirements in paragraph 5. The dimensions of the construction rings shall conform to Figure 3 of this specification.

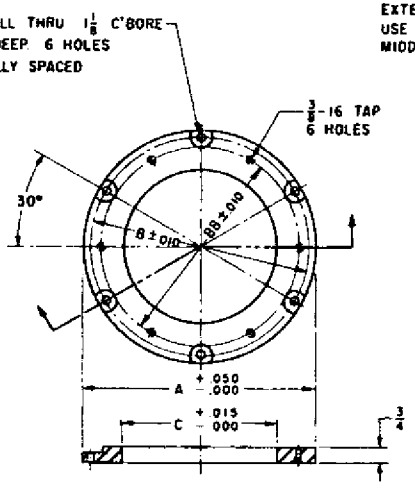
4.2.15 Mud Plates. Mud plates shall be fabricated from a suitable ferrous material necessary to meet the test requirements in paragraph 5. The mud plates shall conform to Figure 3 and dimensions of Figure 5 of this specification. The mud plates shall be plated as specified in paragraph 4.2.10. The mud plates shall have two knock-out holes as shown in Figure 3.

4.2.16 Flange Rings. Flange rings shall be fabricated from a suitable ferrous material necessary to meet the test requirements in paragraph 5. The dimensions of the flange rings shall conform to Figure 5 of this specification. The flange rings shall be plated as specified in paragraph 4.2.10.

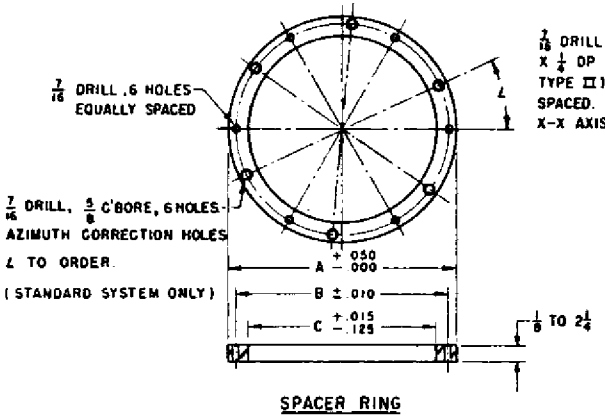
4.2.17 Spacer Rings. Spacer rings shall be fabricated from suitable ferrous material necessary to meet the test requirements in paragraph 5. The dimensions of the spacer rings shall conform to Figure 3 of this specification. The spacer rings shall be plated as specified in paragraph 4.2.10. Provide RTV silicone seal material.

4.2.18 Conversion Rings. Conversion rings shall be fabricated from a suitable ferrous material necessary to meet the test requirements in paragraph 5. The dimensions of the conversion rings shall conform to Figure 3 of this specification. The conversion rings shall be plated as specified in paragraph 4.2.10.

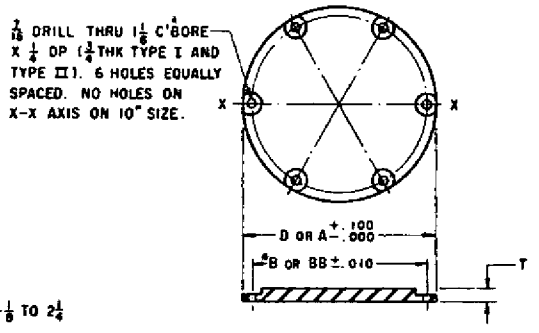
NOTES:
1. USE B DIMENSION FOR TOP SECTION & EXTENSION, TYPE II BASES & TYPE I. USE BB DIMENSION FOR BOTTOM & MIDDLE SECTIONS, TYPE II BASES.
2. SEE FIGURE 5 FOR DIMENSIONS.
3. SUPPLY SIX 18-8 STAINLESS STEEL HEX HEAD $\frac{3}{8}$-16 UNC-2 BOLTS OF A LENGTH REQUIRED FOR MINIMUM $\frac{1}{2}$-INCH ENGAGEMENT IN TOP FLANGE OF BASE.



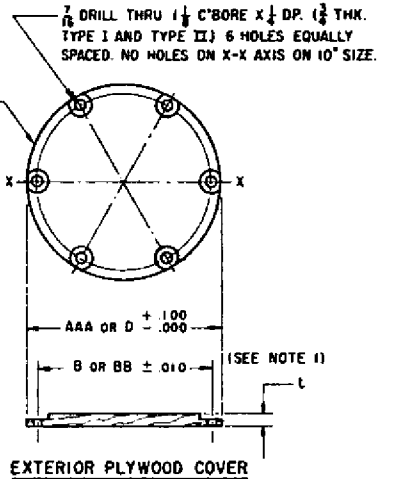
CONVERSION RING
TYPE II



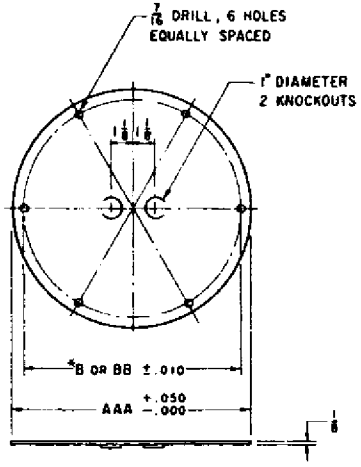
SPACER RING
(SPACER RING AVAILABLE)
SLOPE TO ORDER
TYPE II



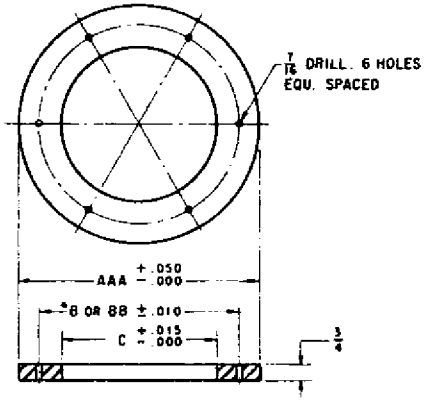
STEEL COVER PLATE
USE A FOR TYPE II BASE
USE D FOR TYPE I BASE



EXTERIOR PLYWOOD COVER
USE AAA FOR TYPE II BASE
USE D FOR TYPE I BASE

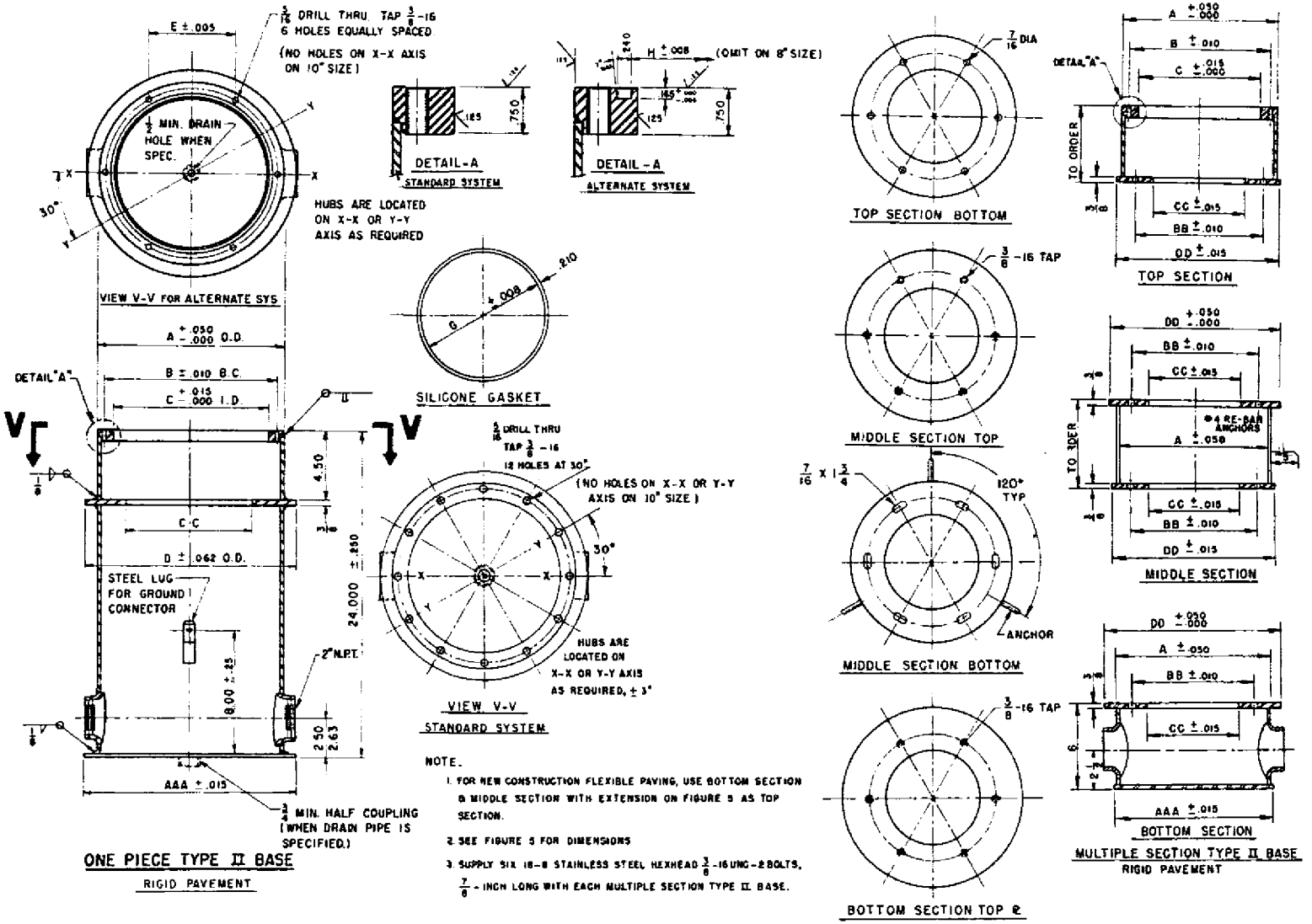


MUD PLATE
TYPE II



CONSTRUCTION RING
TYPE II

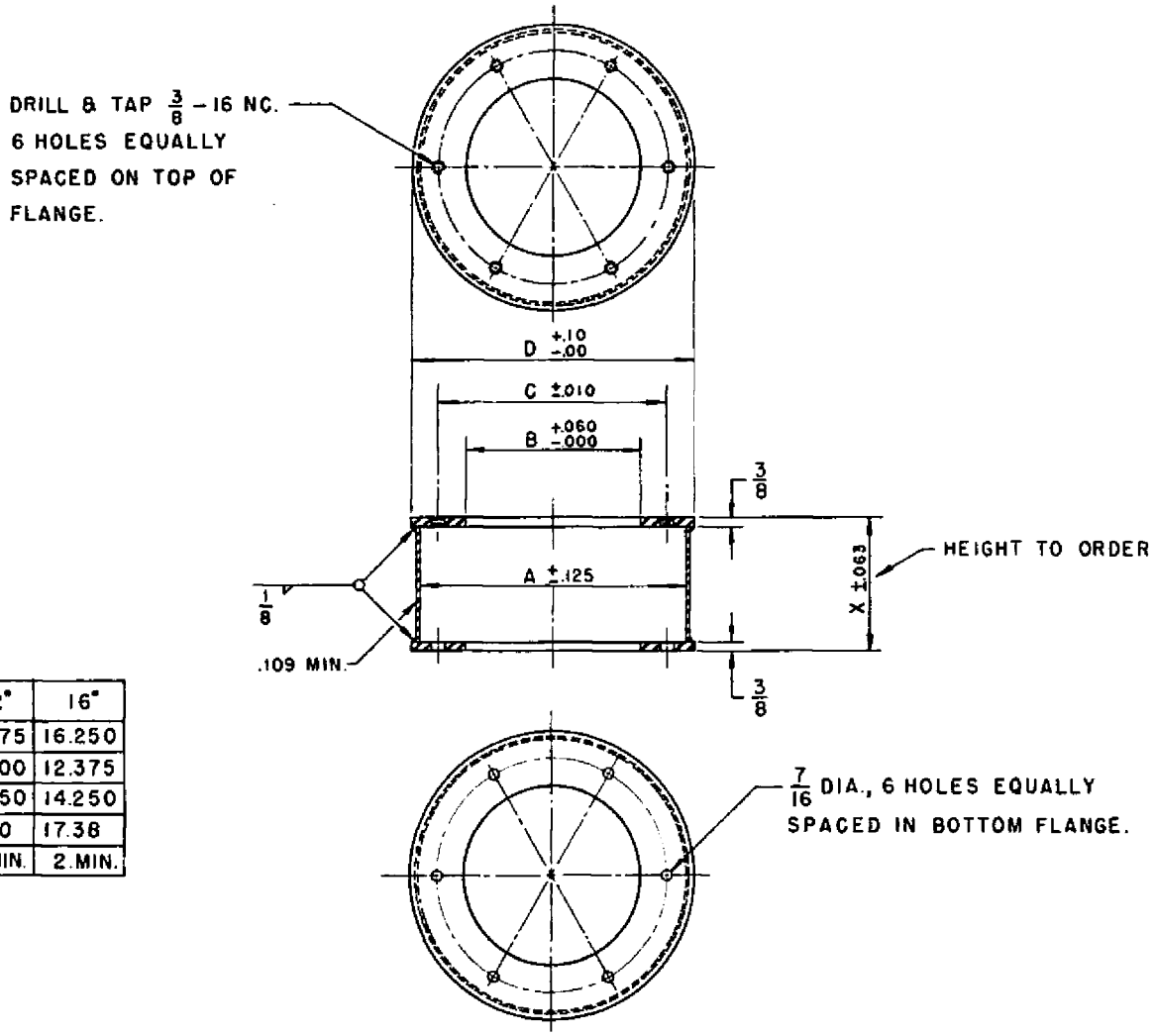
FIGURE 3. TYPE I AND II ACCESSORY RINGS, PLATES AND COVERS



NOTE.

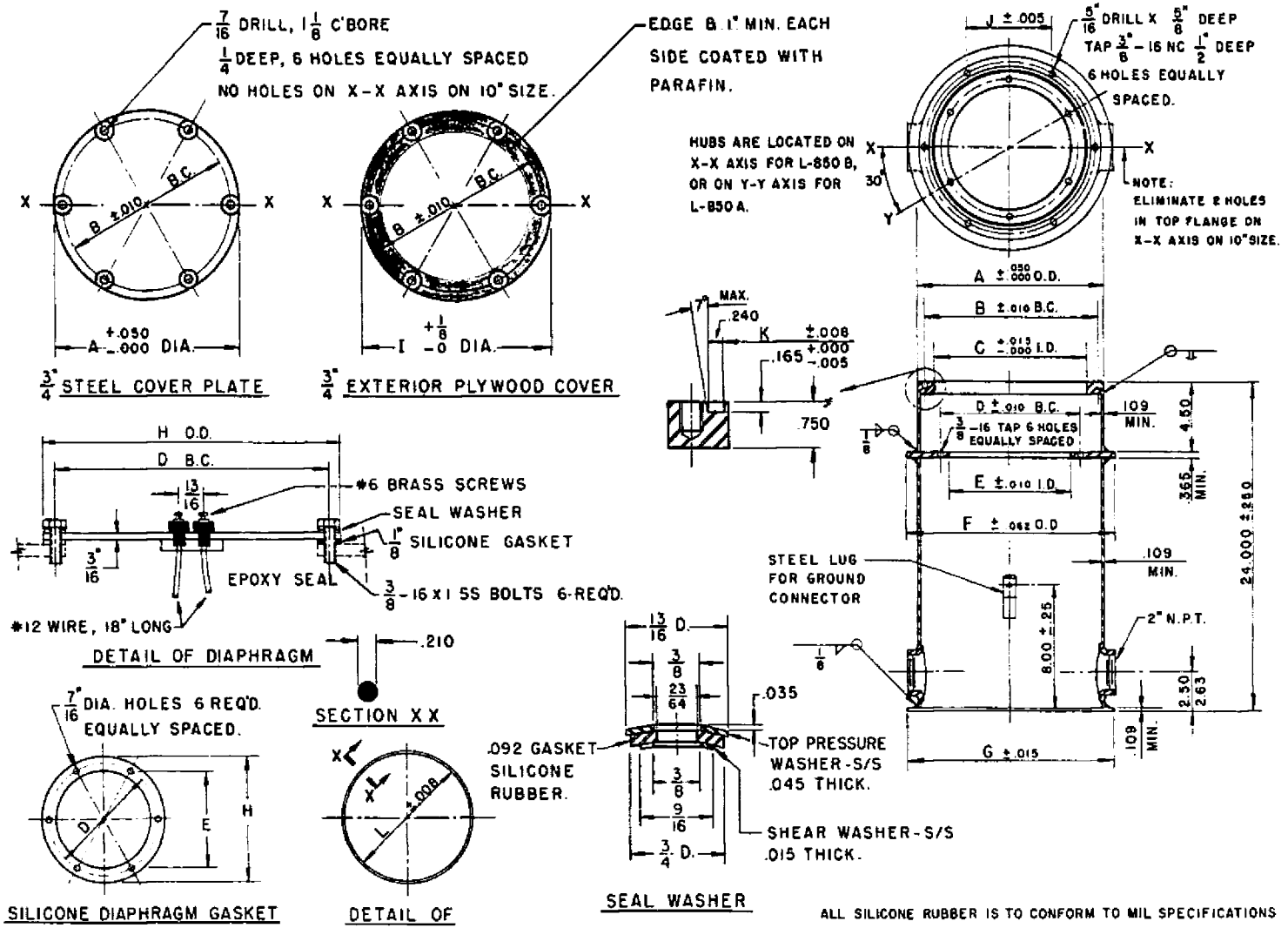
1. FOR NEW CONSTRUCTION FLEXIBLE PAVING, USE BOTTOM SECTION & MIDDLE SECTION WITH EXTENSION ON FIGURE 5 AS TOP SECTION.
2. SEE FIGURE 5 FOR DIMENSIONS
3. SUPPLY SIX 18-8 STAINLESS STEEL HEXHEAD 3/8-16 UNC-2 BOLTS, 7/8 - INCH LONG WITH EACH MULTIPLE SECTION TYPE II BASE.

FIGURE 4. MULTIPLE SECTION TYPE II BASES



NOM MIN.I.D	12"	16"
A	12.375	16.250
B	8.000	12.375
C	10.250	14.250
D	13.50	17.38
X	2.MIN.	2.MIN.

FIGURE 2. TYPE I BASE EXTENSION



ALL SILICONE RUBBER IS TO CONFORM TO MIL SPECIFICATIONS

NOM. O.D	A	B	C	D	E	F	G	H	I	J	K	L
10"	10.000	9.250	8.000	7.000	6.000	12.250	10.375	7.93	10 1/8	4.625	8.145	8.160
12"	12.000	11.250	10.000	9.000	8.000	13.500	13.500	9.93	12 1/8	5.625	10.145	10.160
15"	15.000	14.250	13.000	9.000	8.000	16.500	16.500	9.93	15 1/8	7.125	13.145	13.160

FIGURE 3. TYPE II BASE - 10" and 12" DIAMETER FOR IN TRAFFIC USE