Notes:

1. The diameter of the end section of Design B shall match the inside diameter of the concrete pipe.
2. Skirt sections shall be made in one piece for round pipe with a diameter of 12" (in) to 24" (in) inclusive and for pipe arches with a rise of 13" (in) to 25" (in) inclusive. Skirt sections for larger sizes of pipes may be multiple pieces in conformance with the fabricated values shown.
3. Design A end sections for 42" (in) thru 84" (in) diameter and 49" (in) x 33" (in) thru 83" (in) x 67" (in) arch with annular corrugations and all helically corrugated pipe arch include one foot of pipe length as a connector section. The connector section shall be attached to the end section by welds, rivets or bolts and shall be the same thickness as the end section.
4. Design C may be used in lieu of Design A for all metal pipe sizes except as noted. Coupling bands may be any acceptable type for the pipe specified.
5. Multiple panel skirts shall have 2" (in) tap seams tightly joined by 3/8" (in) stainless steel rivets or galvanized bolts on 6" (in) max. centers.
6. The reinforced edges of the following size End Sections shall be supplemented with galvanized steel stiffener angles:

   - 60" (in) thru 72" (in) diameter pipe
   - 75" (in) and 84" (in) diameter pipe, and
   - 7" (in) x 52" (in) & 83" (in) x 57" (in) pipe arch

   The above galvanized angles shall be attached by 3/8" (in) galvanized nuts and bolts.
7. Galvanized steel angle reinforcement will be placed under the center panel seams on the 72" (in) thru 84" (in) diam. pipe and 77" (in) x 52" (in) & 83" (in) x 57" (in) pipe arch End Sections.
8. As an alternative to the connector lug and threaded rod used on 12" (in) thru 24" (in) culvert pipe, the attachment may be made with a 3" (in) wide strap, 16 gage galvanized steel fastened with a 1/2" (in) diam., 6" (in) long galvanized bolt and one squarehead nut.

Flared End Sections

Standard Plan B-70.60-01

Section A

Pipe & Pipe Arch - Plan

Pipe - Elevation

Pipe Arch - Elevation
FLARED END SECTIONS

TYPE 1
CONNECTION TO METAL PIPE

FOR 12" (IN) THRU 24" (IN) PIPE
AND 17" (IN) x 13" (IN) THRU
30" (IN) x 24" (IN) PIPE ARCH
WITH ANNULAR END CORRUGATIONS

DESIGN A

SMOOTH TAPERED SLEEVE DETAIL
FOR 30" (IN) THRU 84" (IN) PIPE
AND 30" (IN) x 24" (IN) THRU
83" (IN) x 67" (IN) PIPE ARCH
WITH ANNULAR END CORRUGATIONS

TYPE 2
CONNECTION TO METAL OR CORR. HDPE PIPE

DESIGN B
CONNECTION TO CONCRETE OR HDPE PIPE
INLET END ONLY

TYPE 3
CONNECTION TO METAL PIPE

DESIGN C
CONNECTION TO METAL OR CONCRETE PIPE
OUTLET ONLY

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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

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