ALTERNATIVE CONNECTIONS FOR PIPE TO METAL FLARED END SECTIONS

1. All 3-piece bodies to have 0.109" thick sides and 0.138" thick center panels. Width of center panels to be greater than 20% of the pipe perimeters. Multiple panel bodies to have lap seams which are to be tightly joined by rivets or bolts.

2. Reinforced edges to be supplemented with stiffener angles for the 60" thru 84" round, 77" x 52" and 83" x 57" pipe-arch sizes. The angles will be 2" x 3" x 5/16" for the 60" thru 72" round, 77" x 52" and 83" x 57" pipe-arch sizes and 2 ½" x 3" x 1/2" for 77" thru 84" round. The angles to be attached by 3/8" nuts and bolts.

3. Angle reinforcement shall be placed under the center panel seams on the 77" x 52" and 83" x 57" pipe-arch sizes.

4. Toe plates to be available as an accessory when specified.

5. End of pipe to be flared with annular corrugations to conform flared end section so that minimal leakage results from the connection.

6. Reinforcements are to be supplemented with stiffeners for the 60" thru 84" round, 77" x 52" and 83" x 57" pipe-arches. The stiffeners will be 2" x 3" x 5/16" for the 60" thru 72" round, 77" x 52" and 83" x 57" pipe-arch sizes and 2 ½" x 3" x 1/2" for 77" thru 84" round. The stiffeners to be attached by 3/8" nuts and bolts.

7. The types of alternative connections for pipe to metal flared end sections shall conform to the following:

CIRCULAR PIPES -

- 12" thru 24" Type I or II
- 30" thru 84" Type IV or II

PIPE-ARCHES -

- 21" thru 55" Type I or II
- 64" x 43" thru 83" x 57" Type III

MATERIALS:

- CORRUGATED PIPE
- PLASTIC PIPE
- METAL PIPE

NOTES:

- Equivalent plastic FES to meet AASHTO M-294 and ASTM D-1248 specifications, and shall conform to all dimensions shown above except section thickness, which may be 0.004" thinner.

- FLARED END SECTIONS FOR CORRUGATED METAL AND PLASTIC PIPE CULVERTS

- CONNECTOR STRAP DETAIL

- Type I

- Type II

- Type III

- Equivalent plastic FES to meet AASHTO M-294 and ASTM D-1248 specifications, and shall conform to all dimensions shown above except section thickness, which may be 0.004" thinner.

- FLARED END SECTIONS FOR CORRUGATED METAL AND PLASTIC PIPE CULVERTS