GENERAL NOTES:

1. The finished grade and slope of the inlet top are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.

2. When inlets are to be constructed in a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel when necessary.

3. All steel shall have 2" minimum cover unless otherwise shown. Inlets can be either cast-in-place or precast concrete. Chamfer all exposed edges 45°.

4. All reinforcement is ASTM A615/A615M Grade 60 steel, either smooth or deformed. Equivalent area grade 40 steel or 65-kpsi welded wire fabric may be substituted.

5. Inlets to be paid for under the contract unit price for inlets (Closed Flume) EA.

SECTION AA

SECTION DD

SECTION CC

SECTION BB

SINGLE BARREL FLUME

FLUME W/SIDEWALK INLET (CLOSED FLUME) TYPE I

FLUME W/O SIDEWALK INLET (CLOSED FLUME) TYPE II

2015 DESIGN STANDARDS

LAST REVISION: 07/01/14

DESCRIPTION:

FLUME W/SIDEWALK INLET (CLOSED FLUME) TYPE I

INDEX NO. 216

SHEET NO. 1 of 3
SLOPES, DITCH APRON AND ENDWALLS

Scale or Ditch Bottom
Sod For Flumes Without Sidewalk
Sod (Same As Right)
Curb & Gutter Type "F"
Curb & Gutter Type "F"

Existing Ground

The Cost Of The 4" Thick Slab And The E.W. 2%5W2.5 Win. Welded Wire Reinforcement In The Middle Of Slab To Be Included In The Cost Of The Inlet.

Add Details Form Sheet 1
ENDWALL

SECTION AA

FLUME W/O SIDEWALK INLET (CLOSED FLUME) TYPE II
SINGLE BARREL FLUME DEPICTED
1. Provide positive debris control at all upgradient openings. Do not install grates unless one or more of the following conditions exist:
   A. Pipe culvert endwalls are located within the designated clear zones.
   B. Re-letter the others.

STEEL GRATING USE CRITERIA

1. Grates to be used on pipe culvert endwalls located within the designated clear zone. Positive debris control shall be provided at all upgradient openings. Grates shall not be used unless one or more of the following conditions exist:
   A. Drainage area to culvert consists of meadow or infested areas or areas where debris and/or drift is negligible.
   B. Runoff to culvert is by sheet flow or in such ill defined channels that debris transport is not considered a major problem.
   C. Runoff to culvert is minor except on infrequent basis (10 to 15 year frequency); for example a drainage basin in flat sandy terrain with normally low ground water table.
   D. Areas where culvert blockage with resultant backwater would not seriously affect roadway embankment, traffic operation or upland property.

2. Steel grating to be used only where called for in plans.
STEEL GRATING USE CRITERIA

1. Provide positive drain elements at all sag points where no other one of the following conditions exist:

- Model: Where obstructing elements are located within the designated clear zone.

2. Drainage area to cover flow consists of medium or small areas near where debris may drift is negligible.

3. Runoff to cover is by sheet flow or in such ill-defined channels that debris transport is not considered a problem.

4. Runoff to cover is minor except on an infrequent basis (10 to 15 year frequency) for example a dewatering station in flat terrain with normally dry ground water levels.

5. Areas where runoff blockage with resulting backwater would not seriously affect roadway embankment, traffic operation or upland property.

6. Steel grate to be used only when called for in plans.