GENERAL NOTES:

Construction Specifications - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition.

Loading Class - HL-93.
Design Silt weight = 120 p.f.t.
All Concrete shall be Class "5" (f'c = 3000 psi).
Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60.
All bends and hooks shall meet the requirements of AASHTO LEP Article 5.10. All bend dimensions for reinforcing shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars unless noted otherwise.
All reinforcing steel shall have 2 inch clear cover unless noted otherwise.

 Chamfer all exposed corners 1/2" unless noted otherwise.
Bolt material shall conform to ASTM A307. Bolts shall be galvanized to conform to ASTM A153.
Disturbed area of pipe shall be treated in accordance with Standard Specifications requirements when end of pipe is cut to fit skew or slope.
Compact back fill for footing and wing base minimum 95 percent of ASTM D696 maximum dry density.
See Project Plans for culvert layout, invert elevations, finished grade elevations, headwall, apron, and other site specific details. Headwall Quantity Tables are approximate and for information purpose only.
Dimensions shall not be scaled from drawings.

NOTE:
For Dimensions, Quantities and additional Details, see 506.30 12 to 51.

PIPE DIA. CHART
(Use to determine pipe and treatment)

NOTE:
Headwall details shown on this sheet are for pipe 90" in diameter or greater.

ANCHOR BOLT DETAIL
ALTERNATE ANCHOR BOLT DETAIL

DETAILS

OUTLET END
INLET END
OUTLET OR INLET END

DETAILS

FILL PLACEMENT DETAIL

PLAN AT APRON DRAIN

ELEVATION D-D

NOTE: See DETAIL E.

No cut required when pipe slope vs. pipe dia. Falls below line. See DETAIL D.

Cut end of pipe if pipe slope vs. pipe dia. Falls above line. See DETAIL E.

SHEET I OF 2S
IP ALF S
12000 ROR

Pipe Culvert Headwalls

LOADING CLASS - HL-93

AZ STATE DPT OF TRANSPORTATION INFRASTRUCTURE DESIGN AND OPERATIONS MPPE BRIDGE GROUP STRUCTURE DETAIL

P.Eng.

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