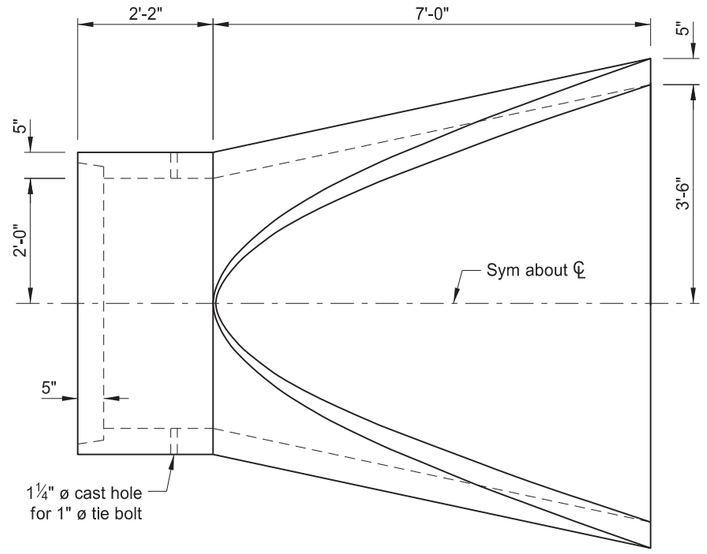
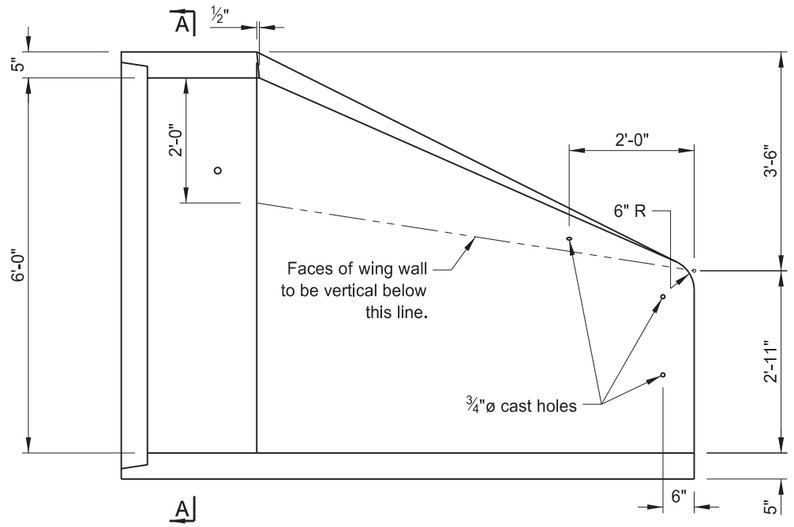
D-714-8

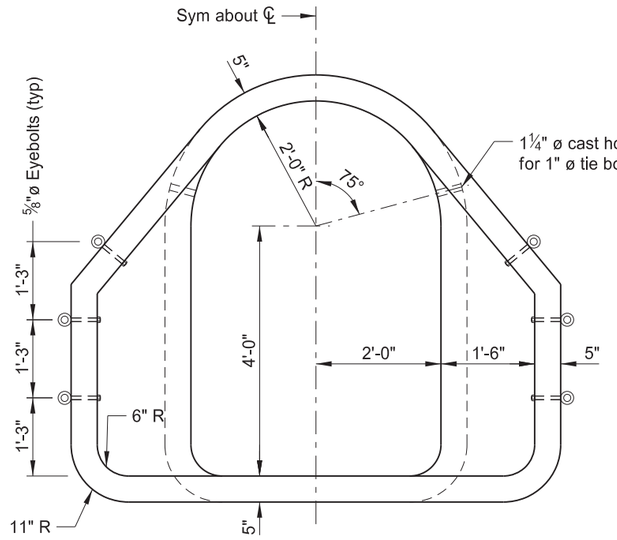
4' X 6' PRECAST CONCRETE CATTLE PASS



TOP VIEW



LONGITUDINAL SECTION ON ℄



END VIEW

(REINFORCING NOT SHOWN)

DETAILS OF FLARED END SECTION

NOTES:

Fill over top of cattle pass; 2' min, 15' max.

Install 4 foot segments of precast concrete cattle pass when necessary to construct the length shown in the plans. Install the 4 foot segments at the barrel ends. Use a maximum of two 4 foot long segments to construct the cattle pass to the desired length.

Tie all joints, including the end sections, with 1" ø tie bolts as shown on Standard Drawing D-714-22. Insert ties from the inside with the nuts on the outside. Provide tight fitting joints with a maximum gap of 3/4" between sections.

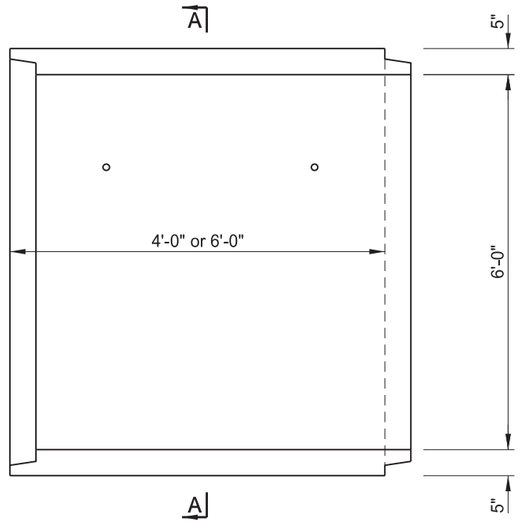
Provide a minimum area of longitudinal reinforcing steel equal to 0.11 sq. in./ft. in each face of the cattle pass (denoted as As3 and As4 in this drawing).

Use welded steel wire reinforcement that meets AASHTO M 55.

Provide splices in welded steel wire reinforcement conforming to the current edition of the AASHTO LRFD Bridge Design Manual.

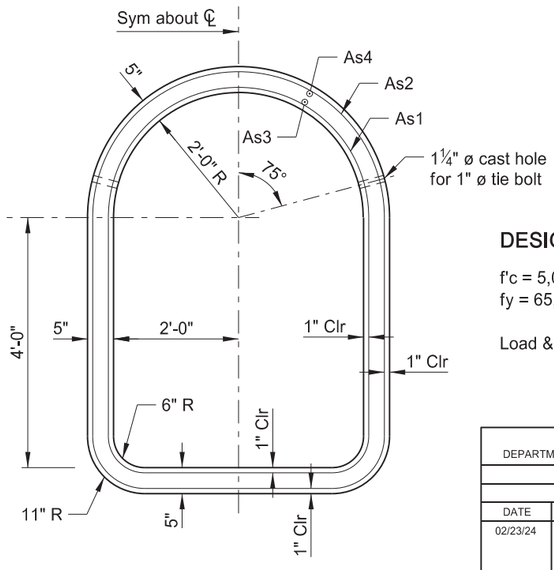
Include cost of furnishing and installing eyebolts in the unit price bid for "End Section Conc Cattle Pass". Galvanize eyebolts according to AASHTO M 232.

Include all hardware embedded in the intermediate sections and end sections and all hardware used to fasten the intermediate sections and end sections in the price bid for "Cattle Pass Conc Intermed Section".

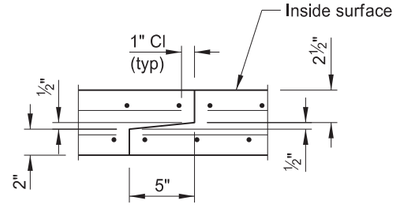


(REINFORCING NOT SHOWN)

LONGITUDINAL INTERMEDIATE SECTION ON ℄



A-A



TONGUE AND GROOVE
JOINT DETAIL

DESIGN STRENGTHS:

f'c = 5,000 psi ~ Precast Concrete
fy = 65,000 psi ~ Welded Wire Fabric Reinforcement

Load & Resistance Factor Design

STEEL AREA (SQ IN PER LIN FT)			
As1	As2	As3	As4
0.26	0.27	0.11	0.11

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
06-30-14	
REVISIONS	
DATE	CHANGE
02/23/24	Updated Signature Revised notes & updated to active volce

REGISTERED PROFESSIONAL ENGINEER
JASON R. THORENSON
PE - 5048
DATE
02/23/24
NORTH DAKOTA