

San Antonio Water System Standard Specifications for Construction

ITEM NO. 858

CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS

858.1 **DESCRIPTION:** This item shall govern placing concrete encasements, cradles, saddles, collars, when called for by the project plans or as directed by the Engineer.

858.2 **MATERIALS:**

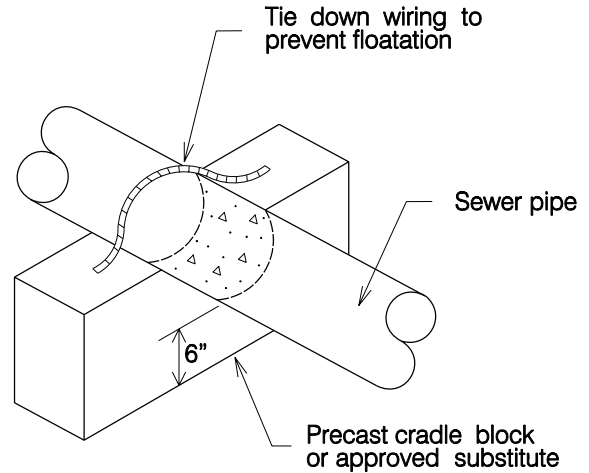
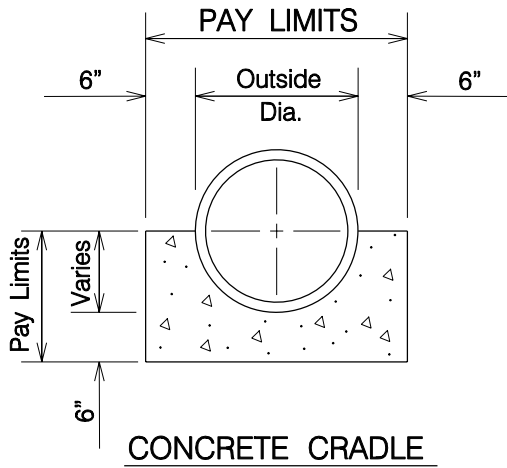
Concrete: All concrete shall conform to the provisions of "Concrete (Class B)", Item No. 300, shall be of the class as noted on the plans.

858.3 **CONSTRUCTION:**

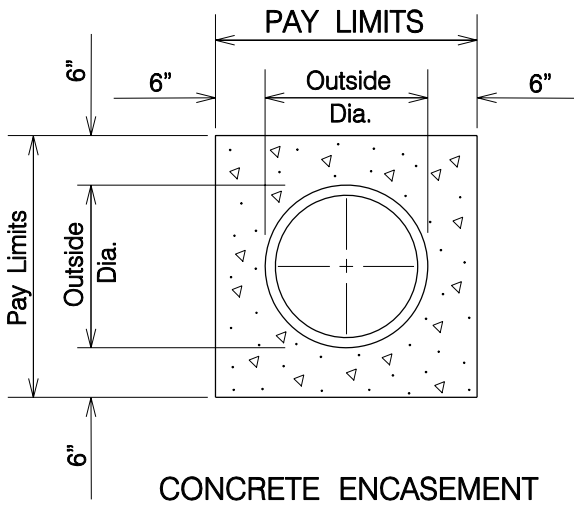
1. Concrete Encasement: When concrete encasement is shown on the plans or when directed by the Engineer, the trench shall be excavated and fine graded to a depth conforming to details and sections shown on the plans, or Standard Drawing DD-858. The pipe shall be supported by precast concrete blocks of the same strength as the concrete for encasement and securely tied down to prevent floatation. Encasement shall then be placed to a depth and width conforming to details and sections shown on the plans.
2. Concrete Cradles: When concrete cradles are shown on the plans or when called for by the Engineer, the trench shall be prepared and the pipe supported in the same manner as described in Paragraph 858.3.1, of this specification and shall be constructed in accordance with details and sections shown on the plans. Straps/Tie Downs shall be of No. 4 rebar diameter minimum or better as determined by SAWS Inspector.
3. Concrete Saddles: When shown on the plans or when directed by the Engineer, pipe to receive concrete saddles shall be backfilled in accordance with "Excavation, Trenching and Backfill", Item No. 804, to the spring line and concrete placed for a depth and width conforming with details and sections shown on the plans.
4. Concrete Collars: When shown on the plans or when directed by the Engineer, concrete collars shall be constructed in accordance with details and sections shown on the plans.

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- 858.4** **MEASUREMENT:** "Concrete Encasement, Cradles, Saddles, and Collars" will be measured by the cubic yard of accepted work, complete in place. Reinforcing, if required, shall not be measured for payment.
- 858.5** **PAYMENT:** "Concrete Encasement, Cradles, Saddles and Collars" will be paid for at the unit price bid per cubic yard, which price shall be full compensation for furnishing and placing all materials, manipulation, labor, tools, equipment and incidentals necessary to complete the work. Payment for concrete encasement shall consist of 6 inches of concrete around the pipe where required (as per DD858-01), minus manholes/structures/etc.

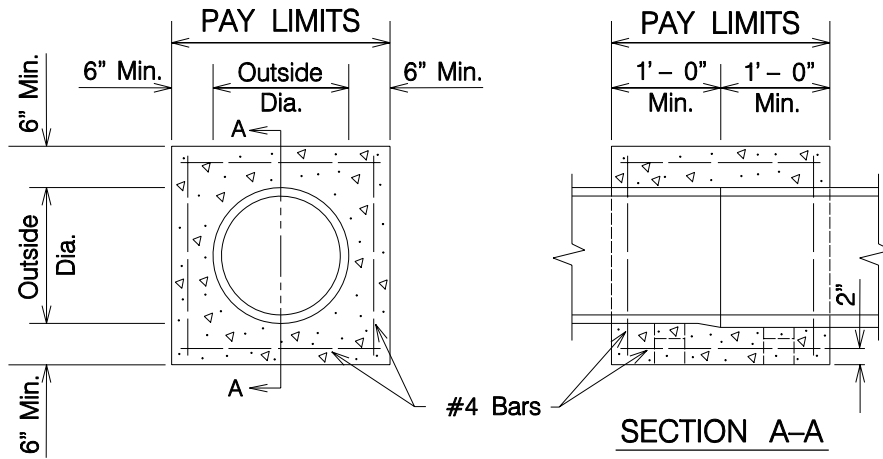


**SUPPORT FOR
ENCASEMENT OR CRADLE**



Notes:

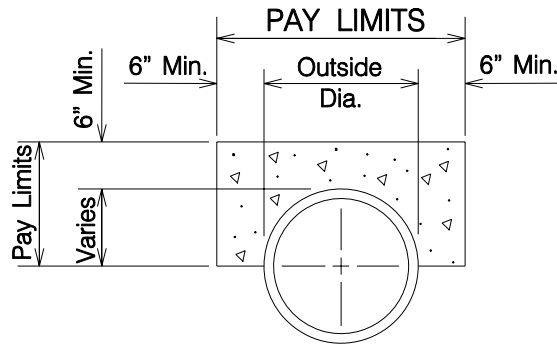
- 1) All concrete encasement shall be poured at a plane 6" above the pipe between excavated trench walls.
- 2) All sewer pipe with less than 3' of cover to subgrade shall be concrete encased.
- 3) All Force mains shall be provided with thrust blocks, where changes in direction occur, at Tees, Bends, Crosses, changes in size, stops, or as directed by SAWS.



After centering pipe ends, wrap joints with 3" wide polyvinyl tape or rubber adapter, Can-Tex.1-70A or equal

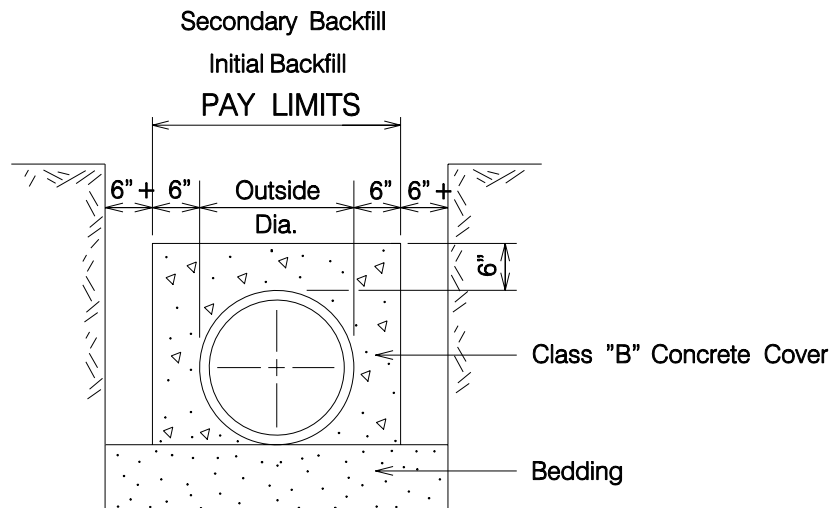
Pipe sections to be blocked and supported similar to the encasement detail shown below, (subject to approval)

CONCRETE JOINTING COLLAR



Note:
All concrete encasement shall be poured at a plane 6" above the pipe between excavated trench walls

TYPICAL CONCRETE SADDLE



CONCRETE COVER FOR FLEXIBLE PIPE

To be used wherever trench width is greater than two feet (2') plus O.D.