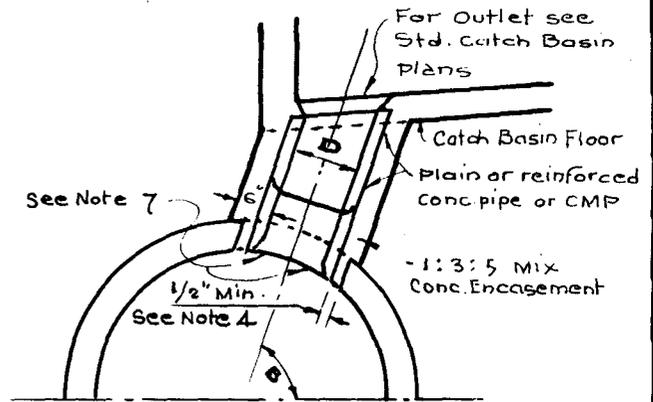
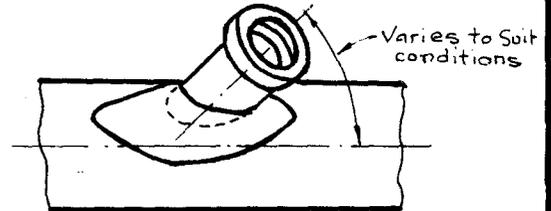


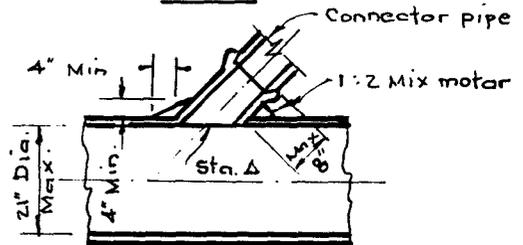
**SECTION B-B  
CASE 1**



**CASE 2**



**PLAN**

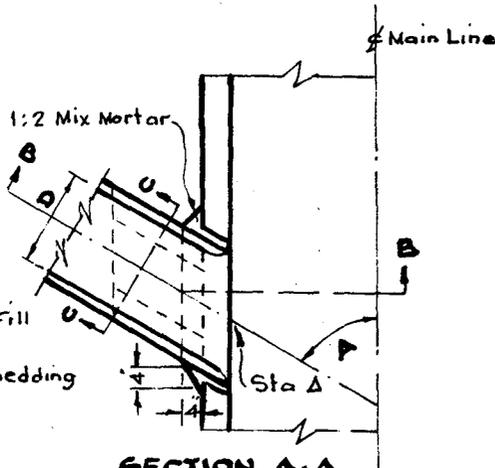


**SECTION**

**CASE 3 - SADDLE CONNECTION**



**SECTION C-C**



**SECTION A-A**

**CASE 1**

**NOTES: CASE 1 AND CASE 2**

1. Angle A shall be between 45° degrees and 90° degrees and D shall be 24 inches or less. For smaller values of A and larger values of D, use appropriate standard structure.
2. In no case shall the outside diameter of the inlet pipe exceed one-half the inside diameter of the main storm drain.
3. Center line of inlet shall be on radius of main storm drain except where Elevation S is shown on project Drawings.
4. The opening into the main storm drain shall be the outside diameter of the inlet pipe plus one inch minimum or 3 inch maximum.
5. All corrugated metal pipe and Fittings shall be galvanized.
6. If Angle B is 45 degrees or less, use Code 1. If Angle B is greater than 45 degrees, use Case 2.
7. Burn or chip end of connector pipe flush with inner surface of mainline pipe. Round edge of concrete pipe or reinforced concrete pipe.
8. Station specified on drawings applies at the intersection of inside wall of main storm drain and center line of inlet pipe.

**NOTES: CASE 3**

1. Connections to pipes 24 inches or less in diameter without junction structures or precast Y branches shall be made with saddles.
2. Trim or cut saddle to fit snugly over the outside of the main pipe, and so its axis will be on the line and grade of the connecting pipe.
3. The opening into the pipe shall be cut and trimmed to fit the saddle so that no part will project within the bars of the saddle pipe.
4. The connecting pipe shall be supported as shown in Cases 1 and 2.

**NOTE:** All connector pipes (within the angles specified for Case 2) shall be encased when laid within the main line excavated trench, or when laid on fill which has not been densified

CITY OF SAN BERNARDINO - PUBLIC WORKS DEPT.

**JUNCTION STRUCTURE  
NO. 4**

APPROVED

*11-7*, 1973  
*J. J. H. H.*  
CITY ENGINEER

STANDARD  
NO.

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