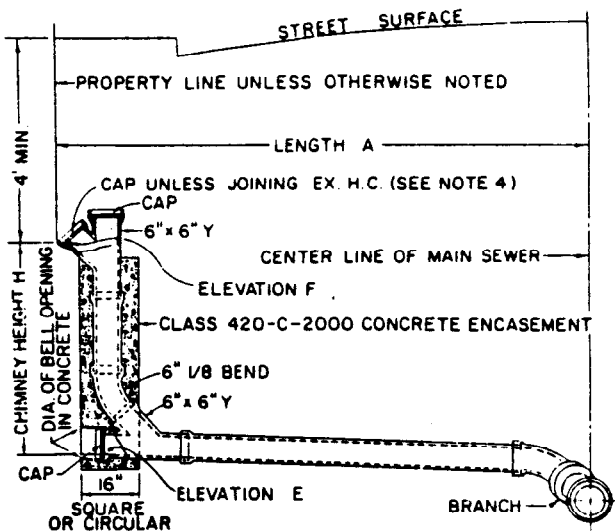
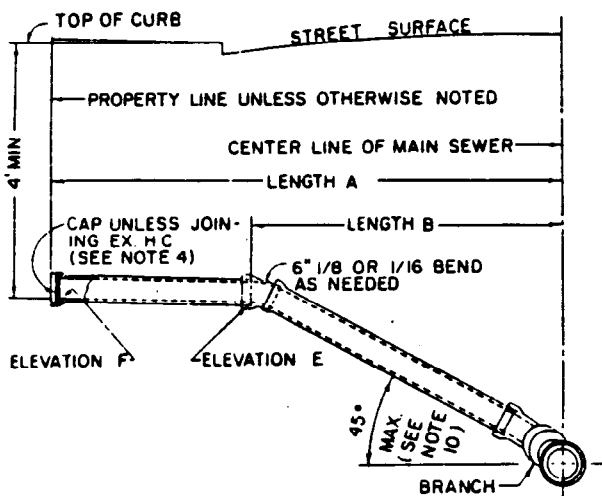


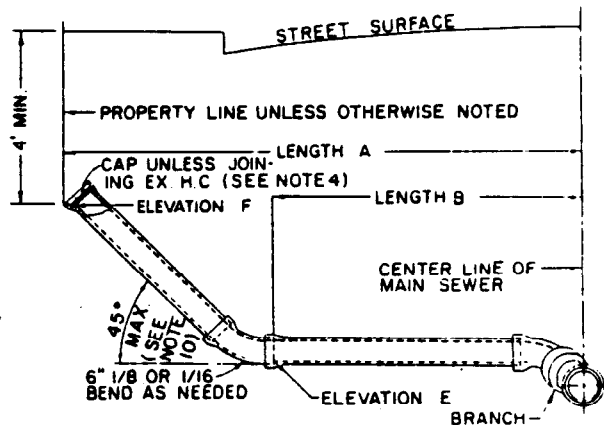
PROFILE
TYPE A



PROFILE
TYPE B



PROFILE
TYPE C



PROFILE
TYPE D

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES

HOUSE CONNECTION SEWERS

STANDARD PLAN
S-110-1

SUBMITTED		REVISIONS				SUPERSEDES		REFERENCES
DATE	BY	NO.	DATE	DESCRIPTION	ENGR OF DESIGN	CITY ENGR		
MARCH 16 1980	Robert J. Lie	1	11/17/82	CHANGED NOTE 3 RE ALLOWABLE PIPE MATERIALS AND STD SPEC REFERENCES	George T. Lie	Phil Kinsey	B-3691, B-3692, B-3693, B-3694, B-3996	S-251
APPROVED								
DESIGNED BY		DRAWN BY		CHECKED BY		VAULT INDEX NUMBER B-4051		
RGS		JRP		LIE		SHEET 1 OF 2 SHEETS		

NOTES FOR HOUSE CONNECTION SEWERS

1. EXCEPT AS OTHERWISE INDICATED ON THE PROJECT PLANS, ALL HOUSE CONNECTION SEWERS SHALL BE TYPE "A" AND SHALL BE CONSTRUCTED ON STRAIGHT LINES AND GRADES BETWEEN CONTROL POINTS AND ELEVATIONS.
2. SEE PROJECT PLANS FOR VALUES OF:
 - A. LENGTHS: "A" AND "B"
 - B. HEIGHT: "H"
 - C. ELEVATIONS: "E" AND "F"
- ▽ 3. ALL HOUSE CONNECTION SEWER PIPE SHALL BE 6 INCH:
 - A) VITRIFIED CLAY PIPE CONFORMING TO SECTION 207-8; OR
 - B) ABS SOLID WALL PIPE CONFORMING TO SECTION 207-15; OR
 - C) ABS COMPOSITE PIPE CONFORMING TO SECTION 207-16; OR
 - D) PVC PLASTIC PIPE CONFORMING TO SECTION 207-17; OR
 - E) CAST IRON OR DUCTILE IRON PIPE CONFORMING TO SECTION 207-9;OF THE STANDARD SPECIFICATIONS. CHANGES FROM ONE TYPE OF MATERIAL OR SIZE TO ANOTHER SHALL BE MADE ONLY BY MEANS OF SUITABLE ADAPTERS APPROVED BY THE ENGINEER.
4. THE UPPER END OF THE HOUSE CONNECTION SHALL BE SEALED BY INSTALLING A CAP AND SEALING THE CAP WITH 1/2 INCH THICK TYPE "F" MORTAR AROUND THE CIRCUMFERENCE OF THE CAP.
5. EXCEPT AS CONTROLLED BY ELEVATIONS INDICATED ON THE PROJECT PLANS, THE MINIMUM SLOPE FOR ALL PIPES SHALL BE 2 PERCENT (S = 0.02 MINIMUM).
6. THE FIGURE IN A CIRCLE ON THE PROJECT PLANS ADJACENT TO A HOUSE CONNECTION SEWER STATION INDICATES THE DEPTH IN FEET BELOW THE EXISTING TOP OF CURB TO WHICH THE INVERT OF THE UPPER END OF THE HOUSE CONNECTION SEWER SHALL BE CONSTRUCTED. IF NO DEPTH IS INDICATED, THE INVERT OF THE UPPER END SHALL BE THE ELEVATION SHOWN ON THE PROFILE. WHERE NEITHER DEPTH NOR ELEVATION IS INDICATED, THE INVERT SHALL BE FOUR FEET BELOW THE TOP OF THE EXISTING CURB.
7. BRANCHES SHALL BE EITHER TEES OR WYES AND SHALL BE ROTATED UPWARD FROM THE HORIZONTAL TO AN ANGLE OF 22 1/2 DEGREES TO 45 DEGREES. WHEN TEES ARE USED, BENDS ARE NOT REQUIRED BUT MAY BE USED AT THE OPTION OF THE CONTRACTOR. WHEN THE BRANCH ROTATION DOES NOT CONFORM TO THE SLOPE OF THE HOUSE CONNECTION SEWER, PULLED JOINTS MAY BE USED FOR ADJUSTMENT.
8. THE MAXIMUM DEFLECTION AT EACH JOINT FOR 6-INCH VITRIFIED CLAY PIPE HOUSE CONNECTION SEWERS SHALL BE 4 DEGREES, WHICH IS EQUAL TO A PULL OF 9/16 INCH. (PULL IS DEFINED AS THE SEPARATION OF THE ABUTTING PIPE ENDS ON THE CONVEX SIDE OF THE CURVE MEASURED AT THE OUTSIDE OF THE PIPE BARREL.)
9. CONNECTION OF A BUILDING SEWER SMALLER THAN 6 INCHES TO A 6 INCH HOUSE CONNECTION SEWER SHALL BE MADE USING AN APPROVED INCREASER - TEE OR A INCREASER FOLLOWED BY A TEE.
10. ALL HOUSE CONNECTION SEWERS OR PORTIONS THEREOF CONSTRUCTED ON A SLOPE EXCEEDING 45° SHALL BE ENCASED IN CONFORMITY TO CASE 4 BEDDING PER STANDARD PLAN S-251.
11. HOUSE CONNECTION SEWERS CONSTRUCTED PURSUANT TO A HOUSE CONNECTION PERMIT SHALL CONFORM TO SECTION 64.17 OF THE LOS ANGELES MUNICIPAL CODE.