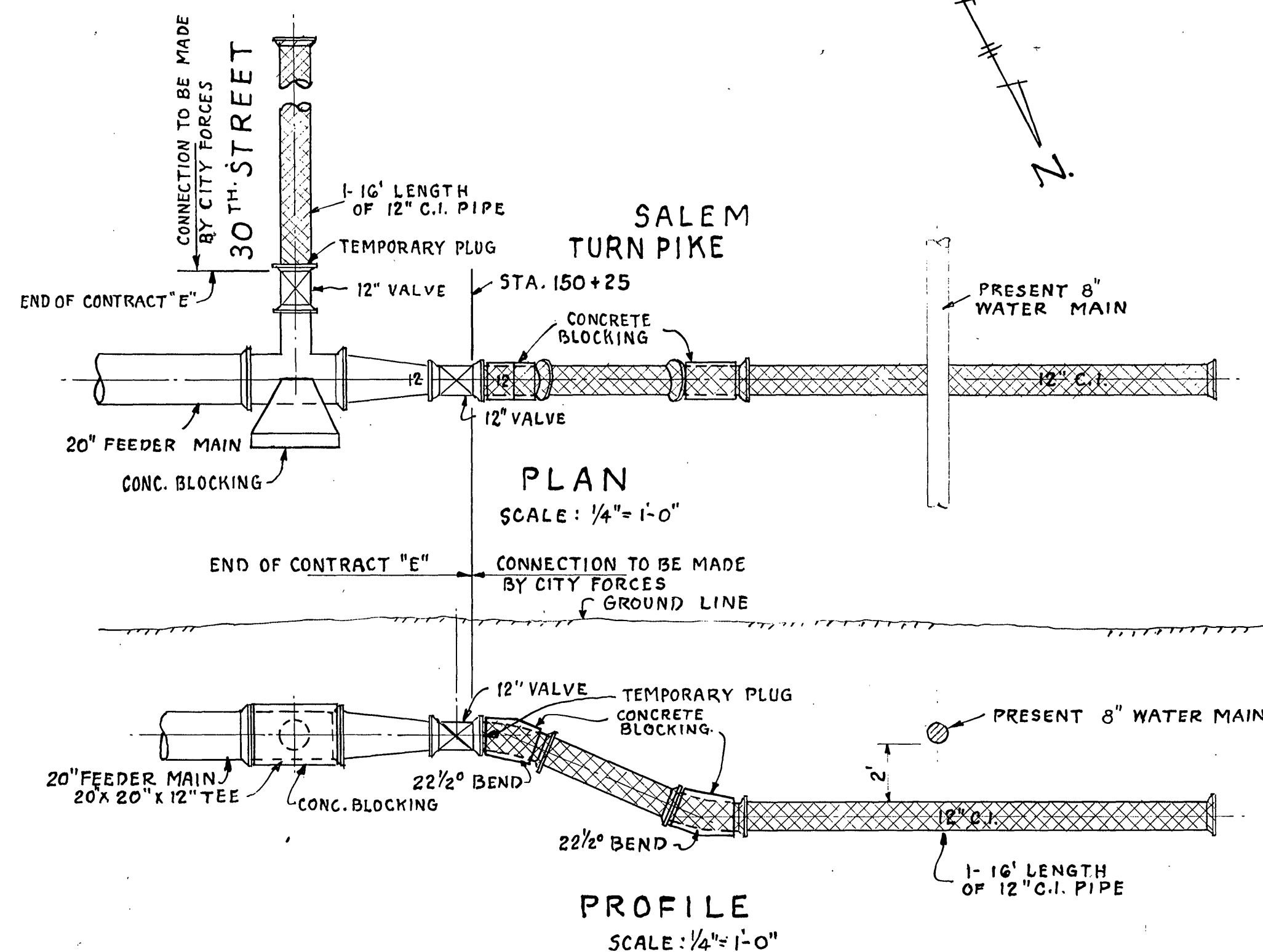
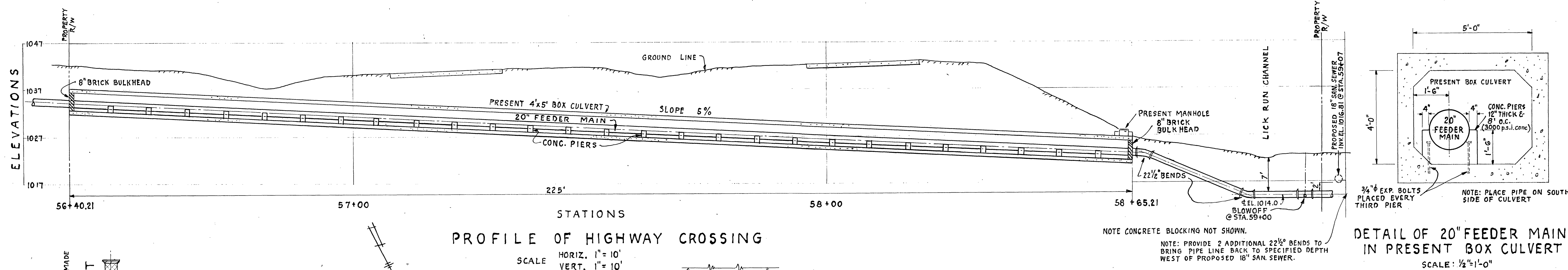
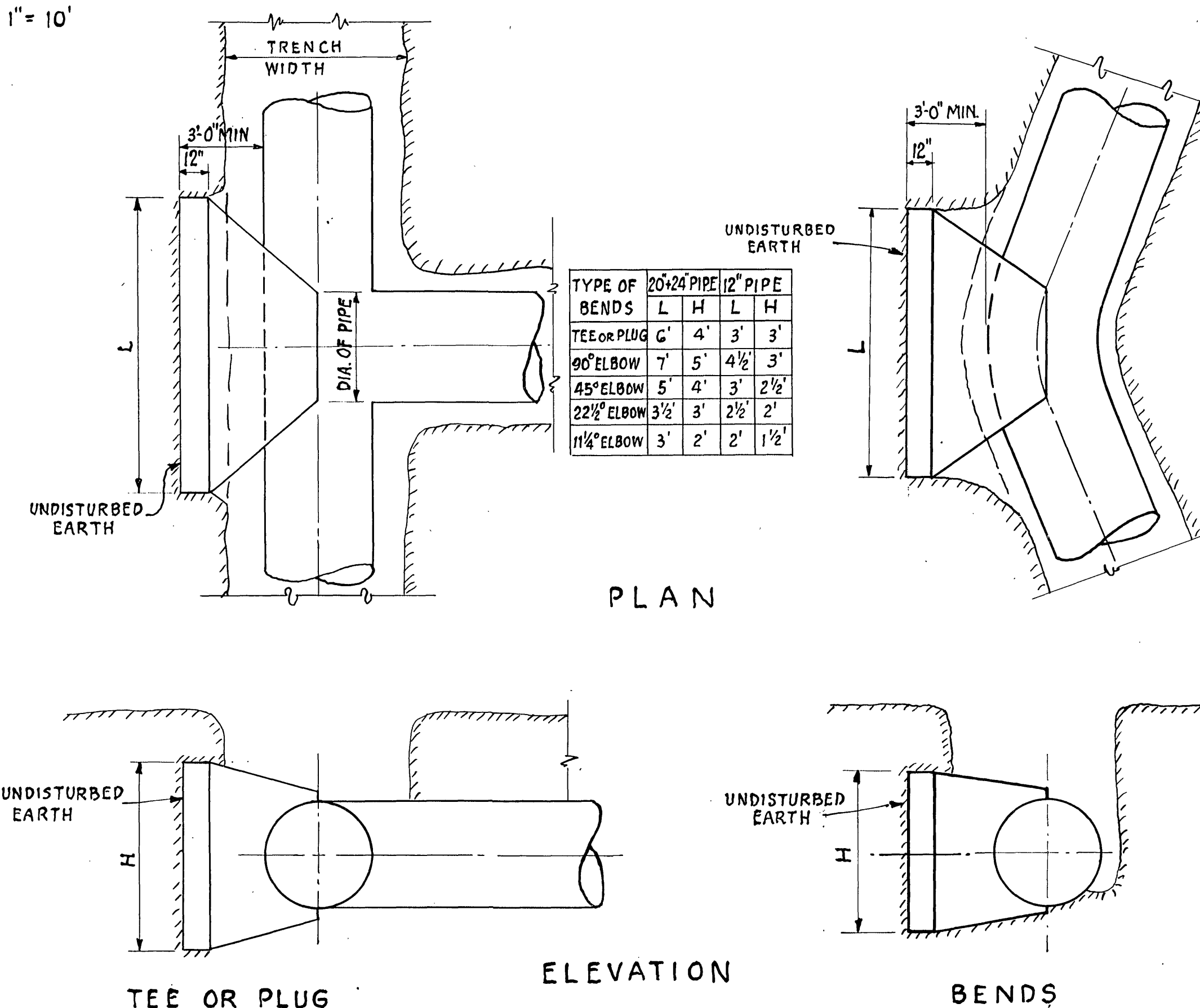
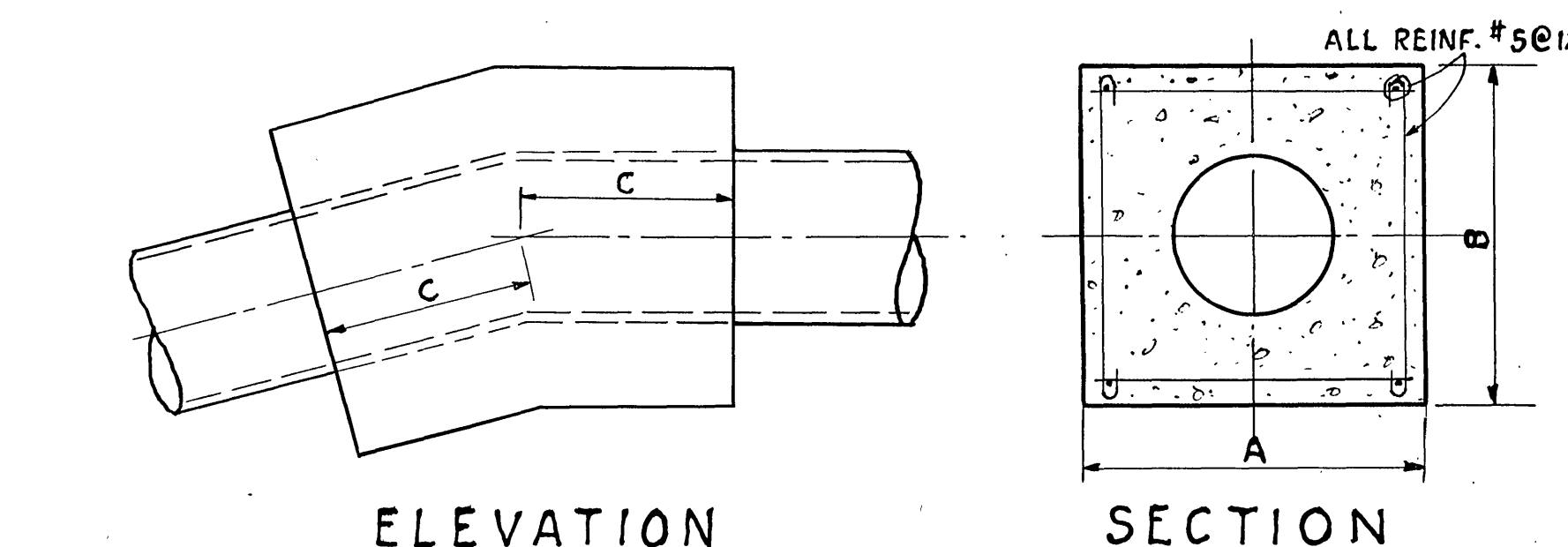




DETAIL AT END OF 20" FEEDER MAIN



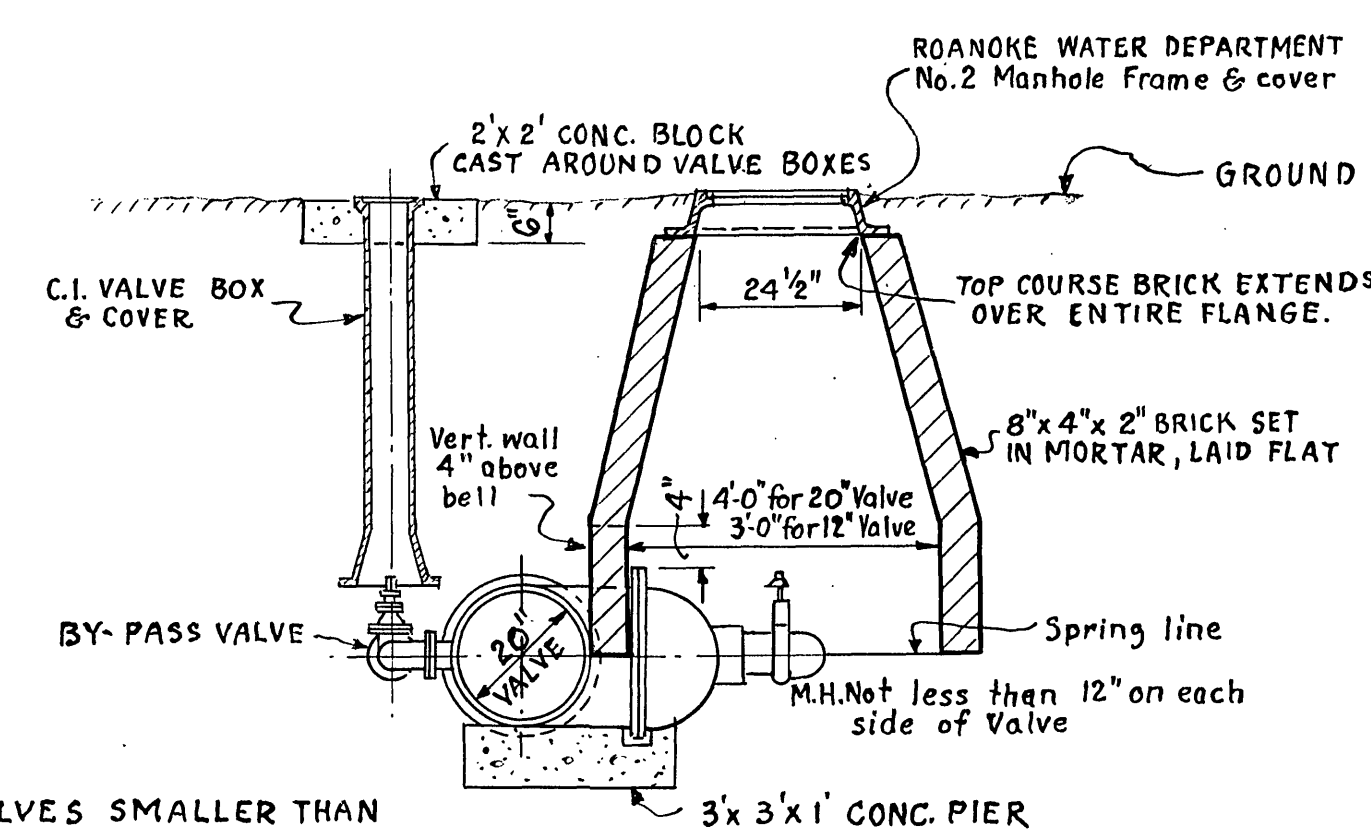
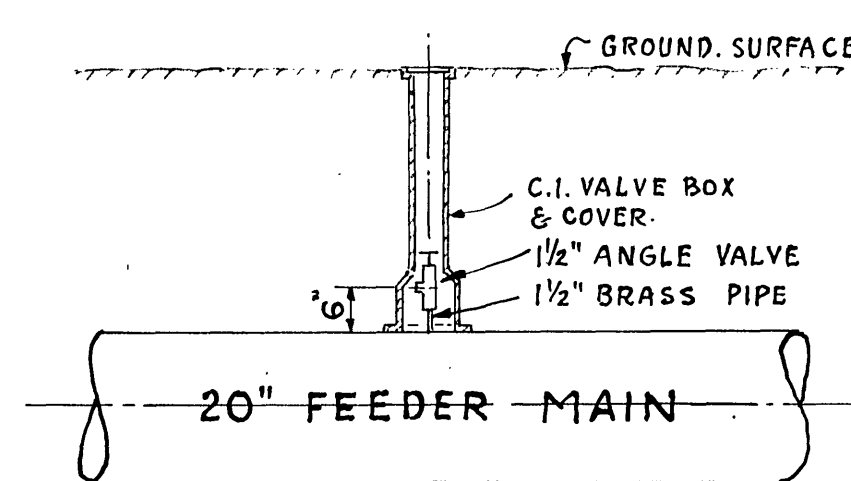
TEE & BEND BLOCKING  
 (NO SCALE)



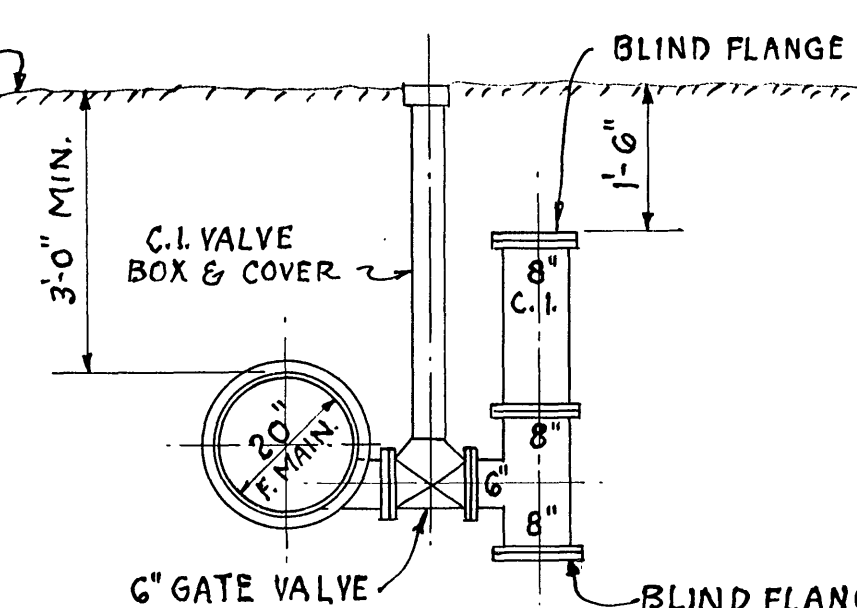
| VERTICAL DEFLECTION ANGLE | 20" x 24" PIPE |        |        | 12" PIPE |        |    |
|---------------------------|----------------|--------|--------|----------|--------|----|
|                           | A              | B      | C      | A        | B      | C  |
| 45°                       | 5 1/2'         | 5 1/2' | 5'     | 4'       | 4'     | 3' |
| 22 1/2°                   | 4 1/2'         | 4 1/2' | 3'     | 2 1/2'   | 2 1/2' | 2' |
| 11 1/4°                   | 2 1/2'         | 2 1/2' | 1 1/2' | -        | -      | -  |

NOTE: USE COUNTER-WEIGHTS AS SHOWN IN SCHEDULE ABOVE FOR ALL VERTICAL BENDS

CONCRETE COUNTER-WEIGHT FOR VERTICAL BENDS  
 (NO SCALE)



NOTE: VALVES SMALLER THAN 20" REQUIRE NO BY-PASS



E-5

DELRAY DISTRIBUTION SYSTEM  
**DETAILS**  
 CITY OF ROANOKE WATER DEP'T.  
 ROANOKE, VIRGINIA  
 ALVORD, BURDICK & HOWSON  
 ENGINEERS CHICAGO