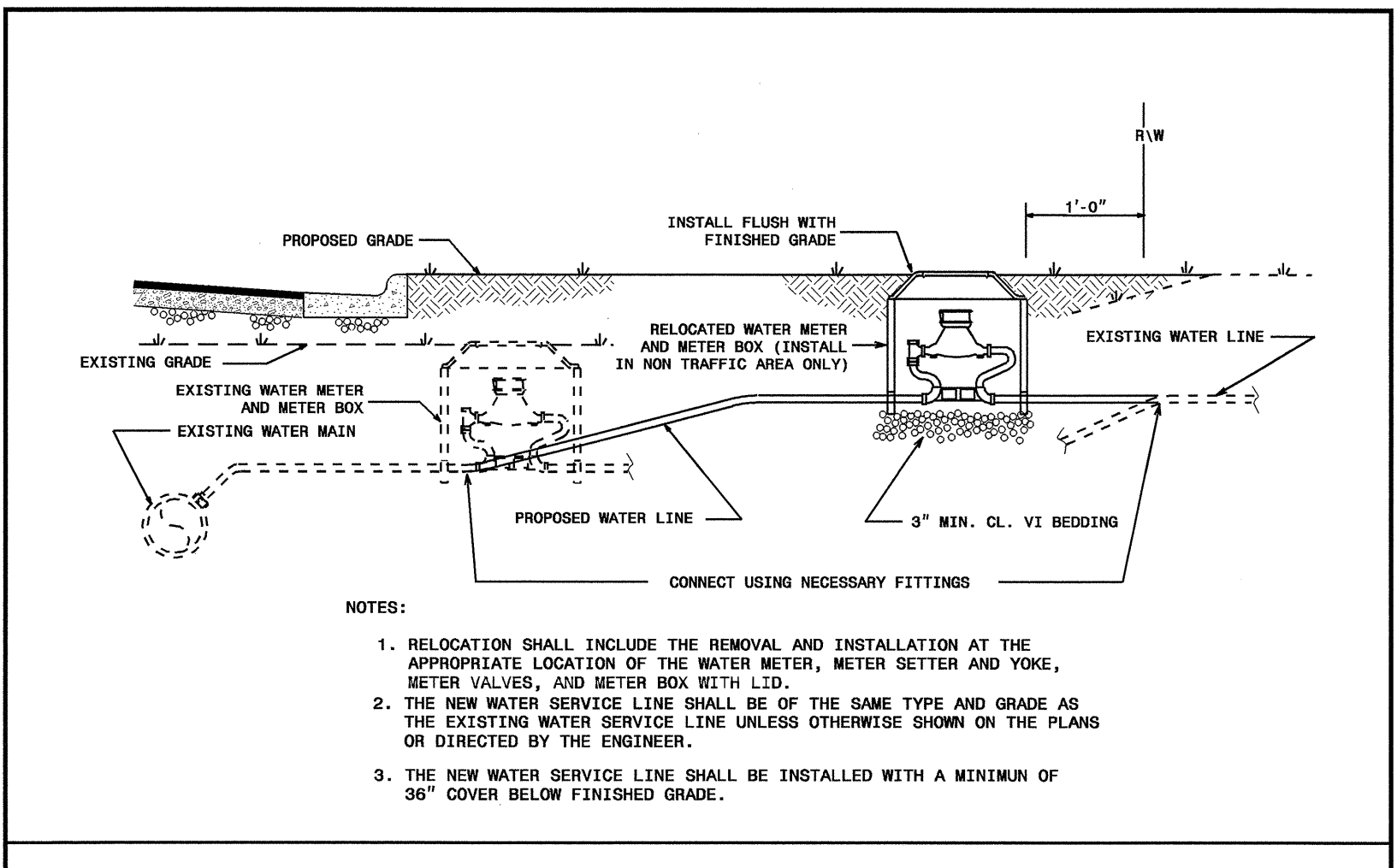
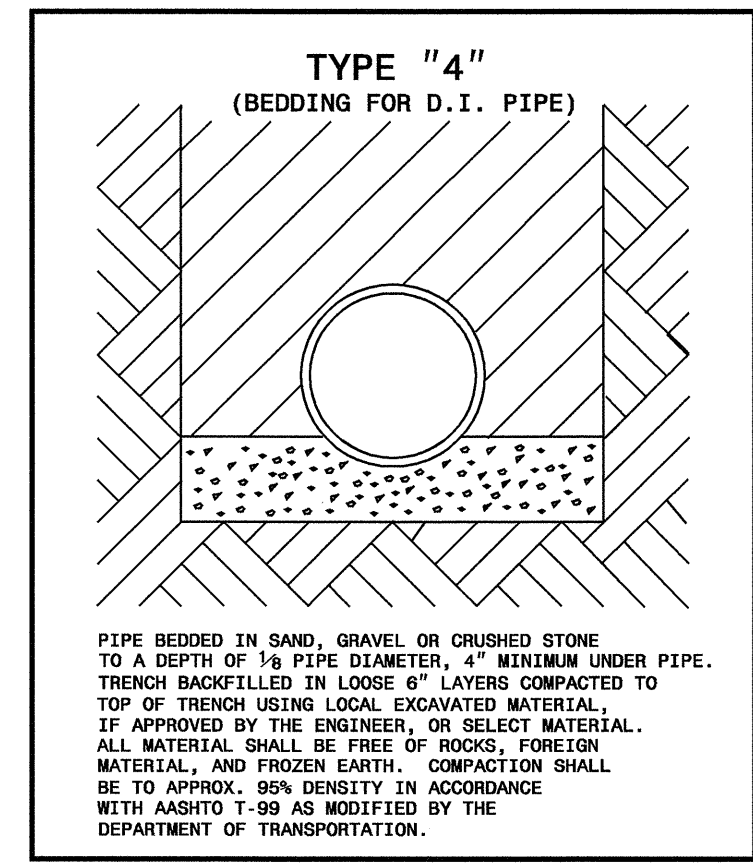


UTILITY CONSTRUCTION

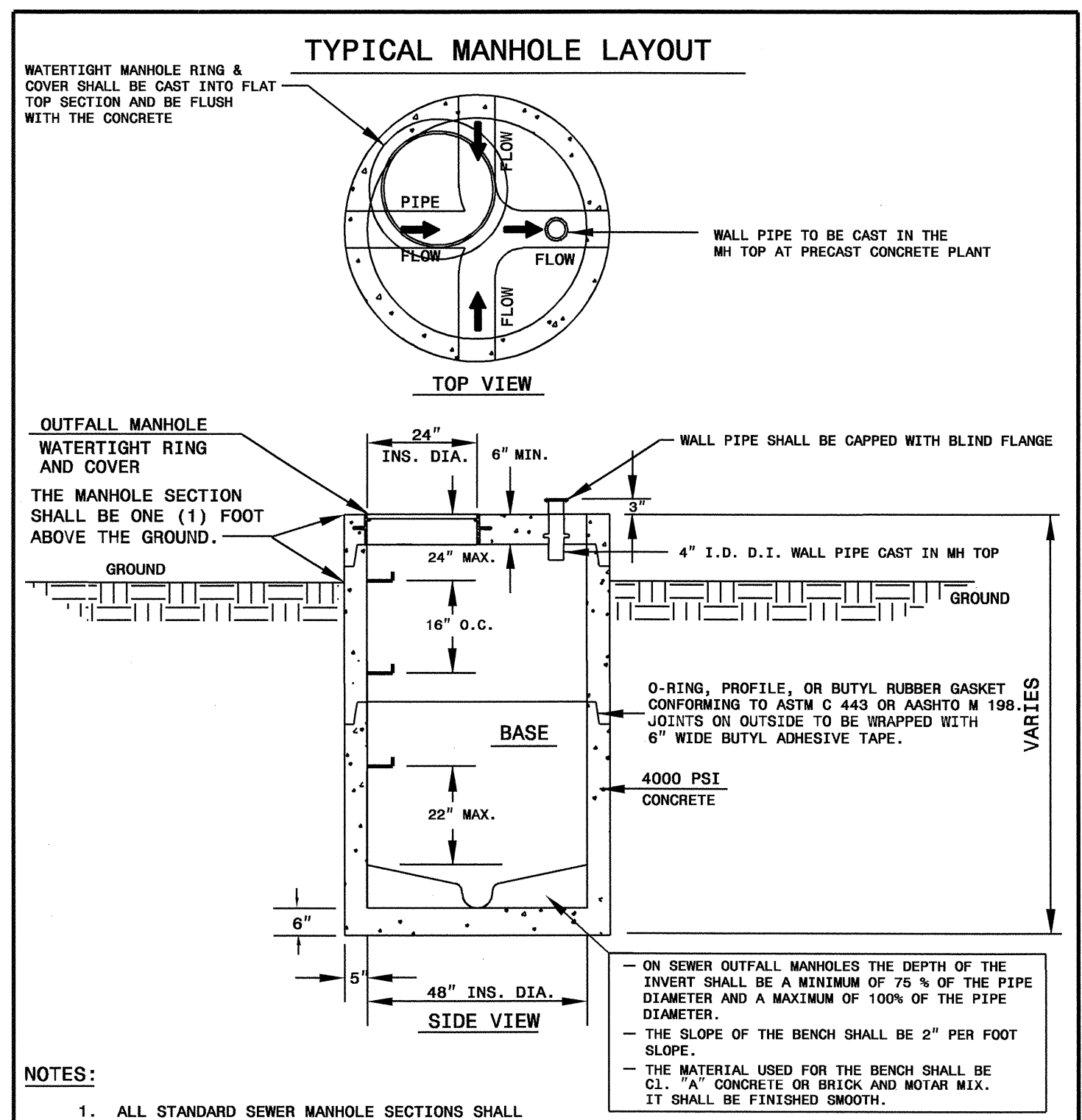


- NOTES:
1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE APPROPRIATE LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID.
 2. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
 3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

WATER METER RELOCATION DETAIL

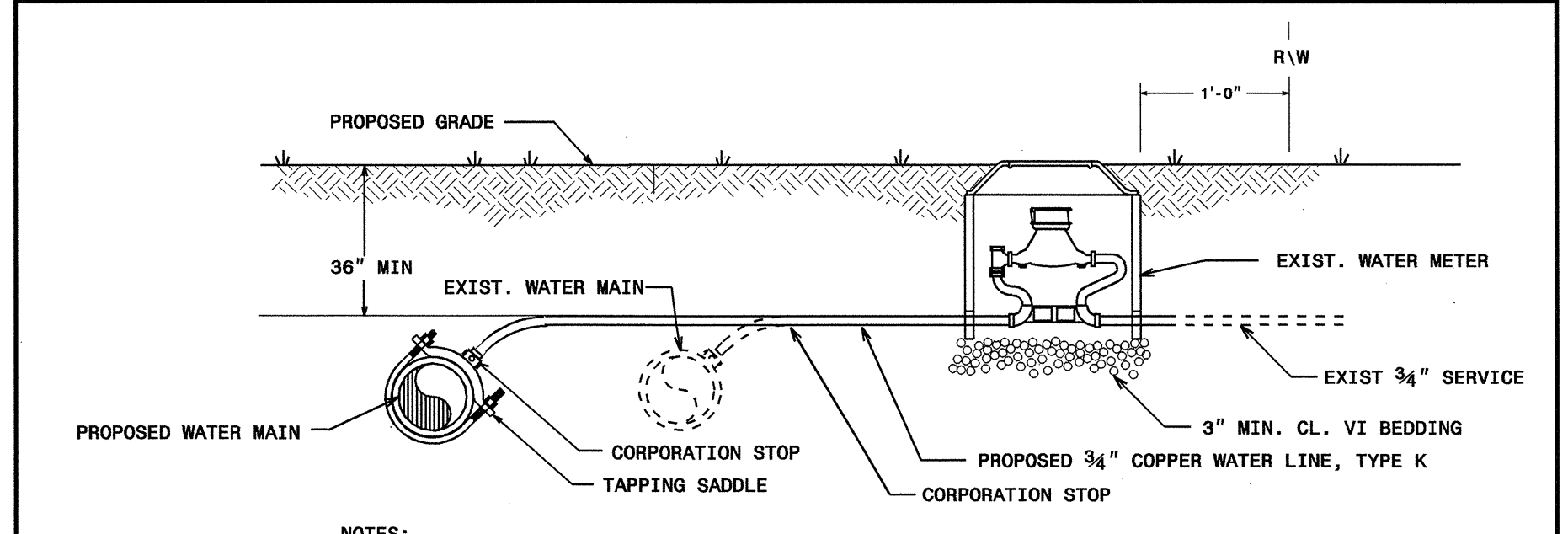


MAXIMUM TRENCH WIDTH AT TOP OF PIPE	
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28
6	30
8	32
10	34
12	36
14	38
16	40
18	42
20	44
24	48
30	54
36	60
42	66
48	72
54	78



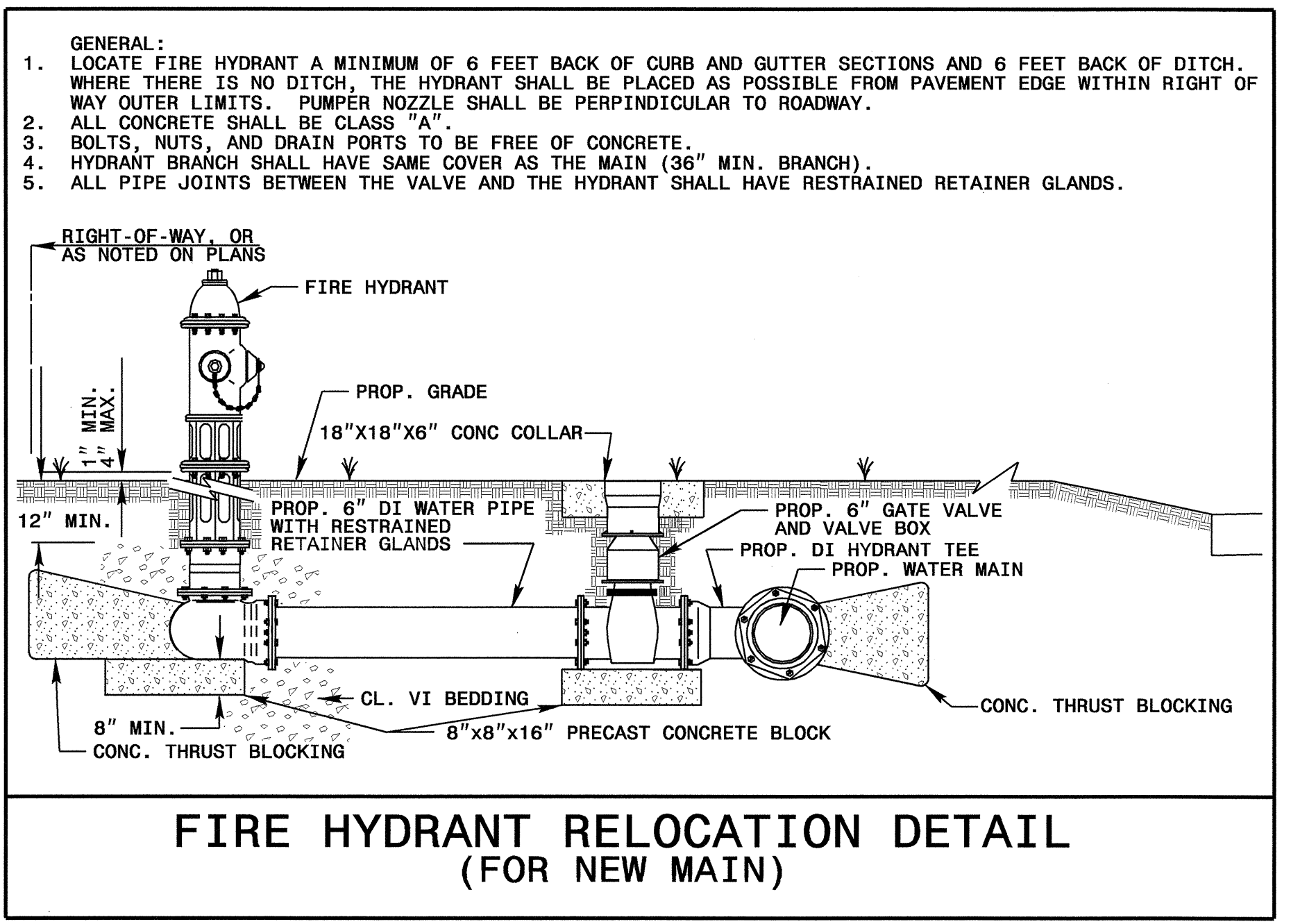
- NOTES:
1. ALL STANDARD SEWER MANHOLE SECTIONS SHALL MEET REQUIREMENTS OF ASTM C 478.
 2. STEPS NOT TO BE PLACED OVER INFUNENT OR EFFLUENT PIPES. STEPS TO BE ALONG VERTICLE WALL SURFACE FROM SHELF TO TOP OF MANHOLE.
 3. ALL LIFT INSERTS AND HOLES SHALL BE COMPLETELY FILLED WITH NON-SHRINK GROUT AFTER MANHOLE IS SET

VENTED MANHOLE DETAIL



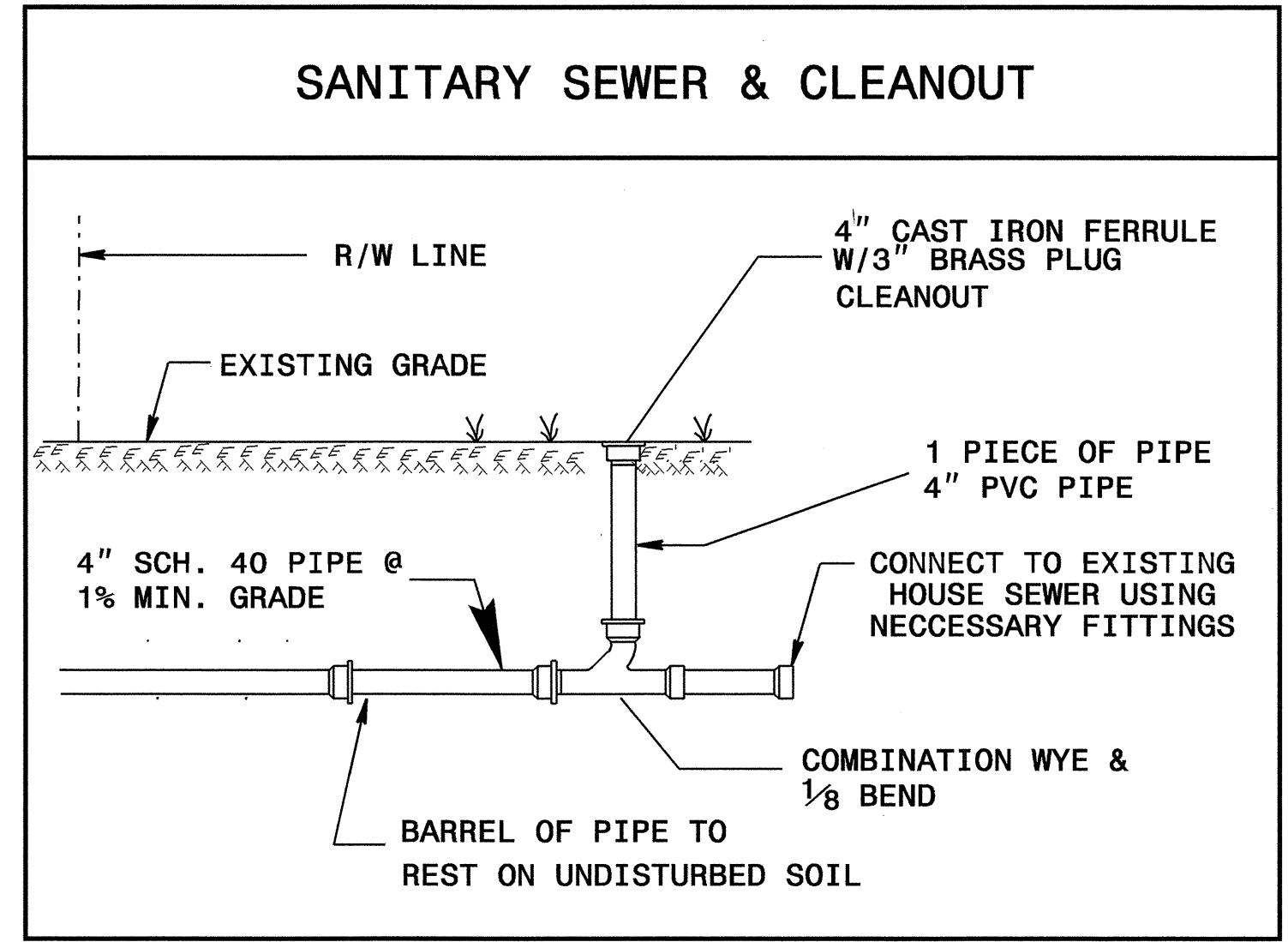
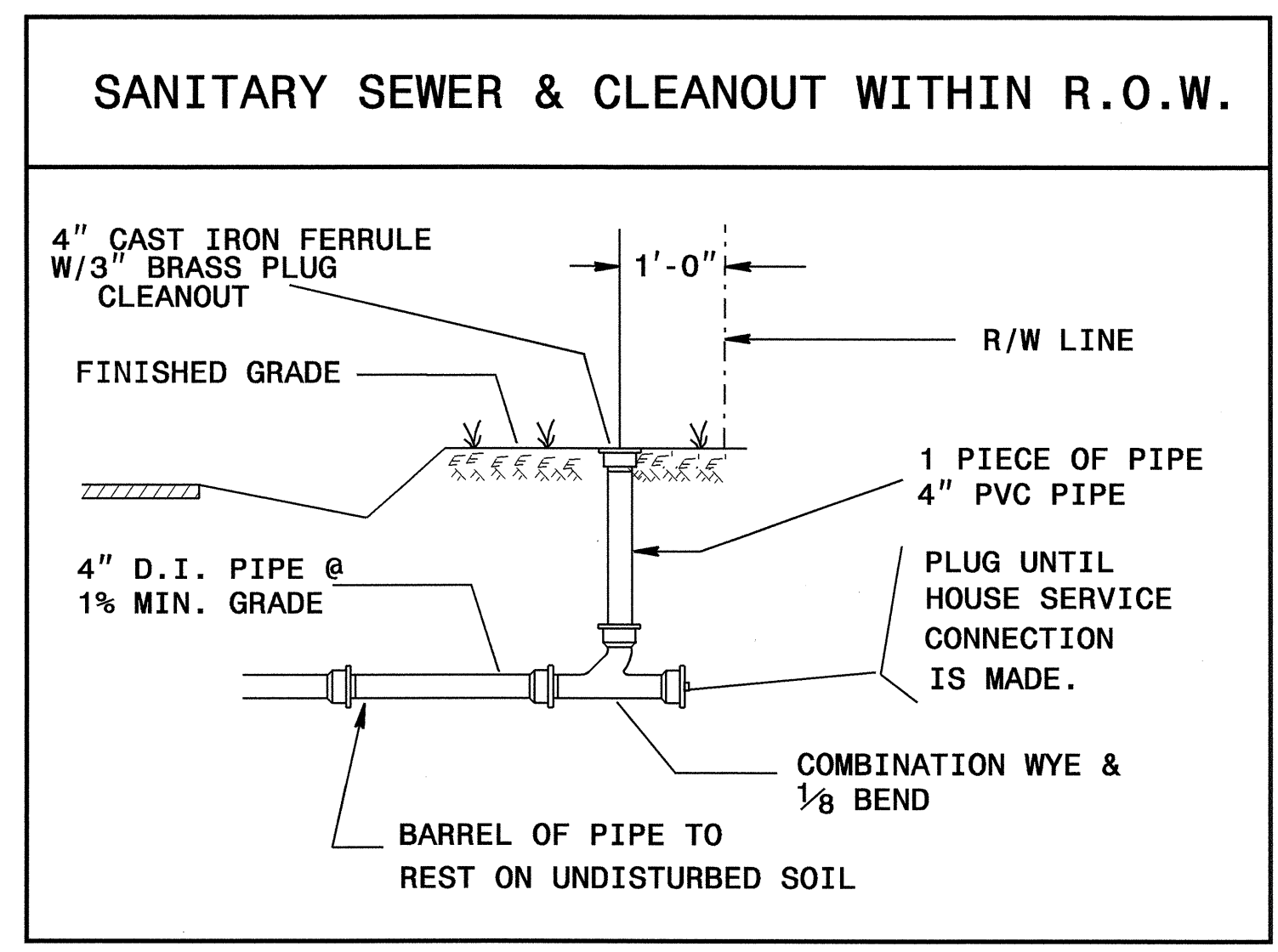
- NOTES:
1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE APPROPRIATE LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID.
 2. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
 3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

WATER METER RELOCATION TO NEW WATER MAIN DETAIL



- GENERAL:
1. LOCATE FIRE HYDRANT A MINIMUM OF 6 FEET BACK OF CURB AND GUTTER SECTIONS AND 6 FEET BACK OF DITCH. WHERE THERE IS NO DITCH, THE HYDRANT SHALL BE PLACED AS POSSIBLE FROM PAVEMENT EDGE WITHIN RIGHT OF WAY OUTER LIMITS. PUMPER NOZZLE SHALL BE PERPENDICULAR TO ROADWAY.
 2. ALL CONCRETE SHALL BE CLASS "A".
 3. BOLTS, NUTS, AND DRAIN PORTS TO BE FREE OF CONCRETE.
 4. HYDRANT BRANCH SHALL HAVE SAME COVER AS THE MAIN (36" MIN. BRANCH).
 5. ALL PIPE JOINTS BETWEEN THE VALVE AND THE HYDRANT SHALL HAVE RESTRAINED RETAINER GLANDS.

FIRE HYDRANT RELOCATION DETAIL (FOR NEW MAIN)



8/17/99