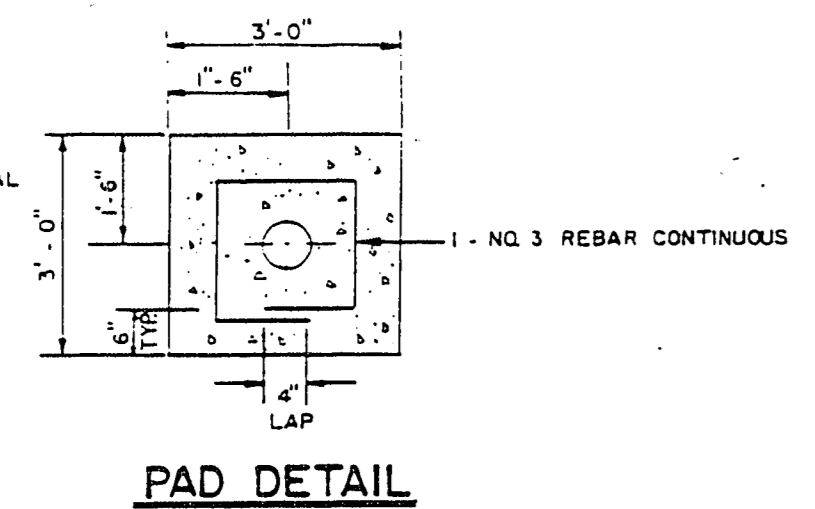
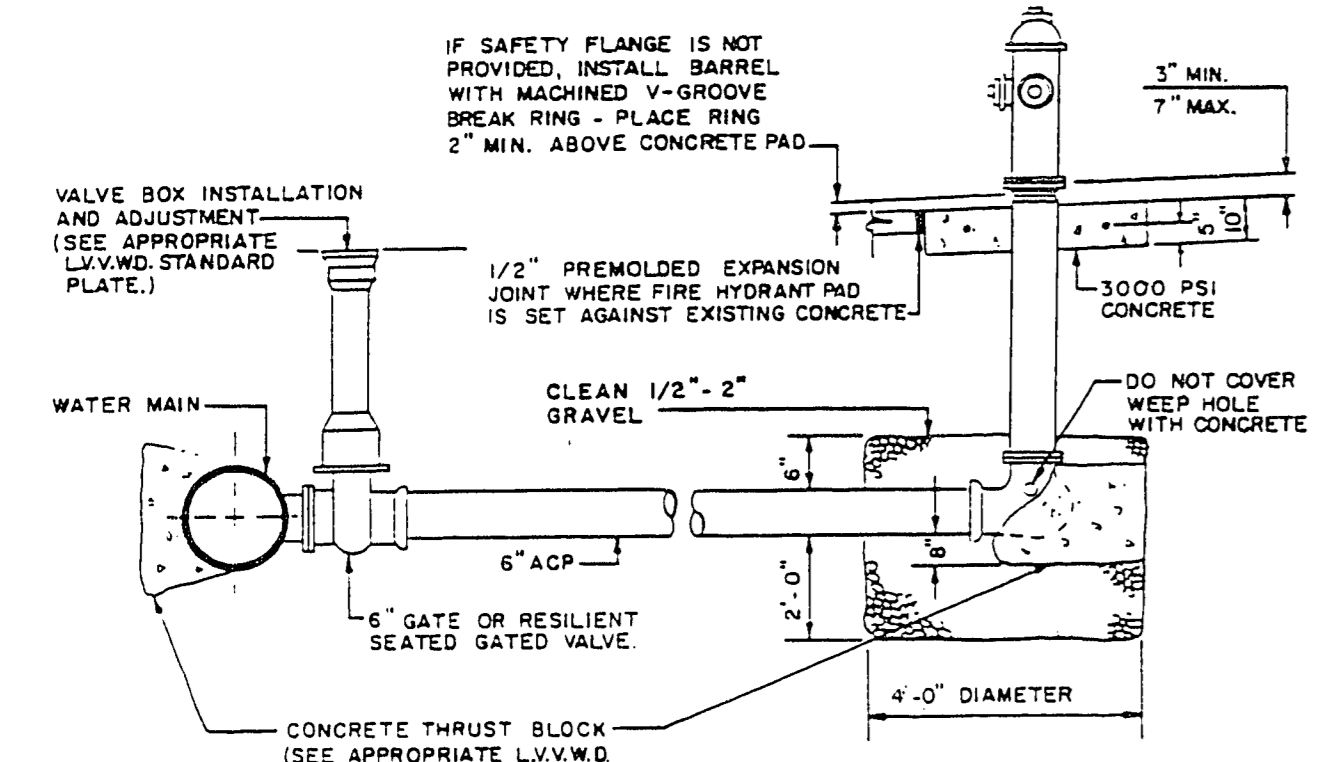


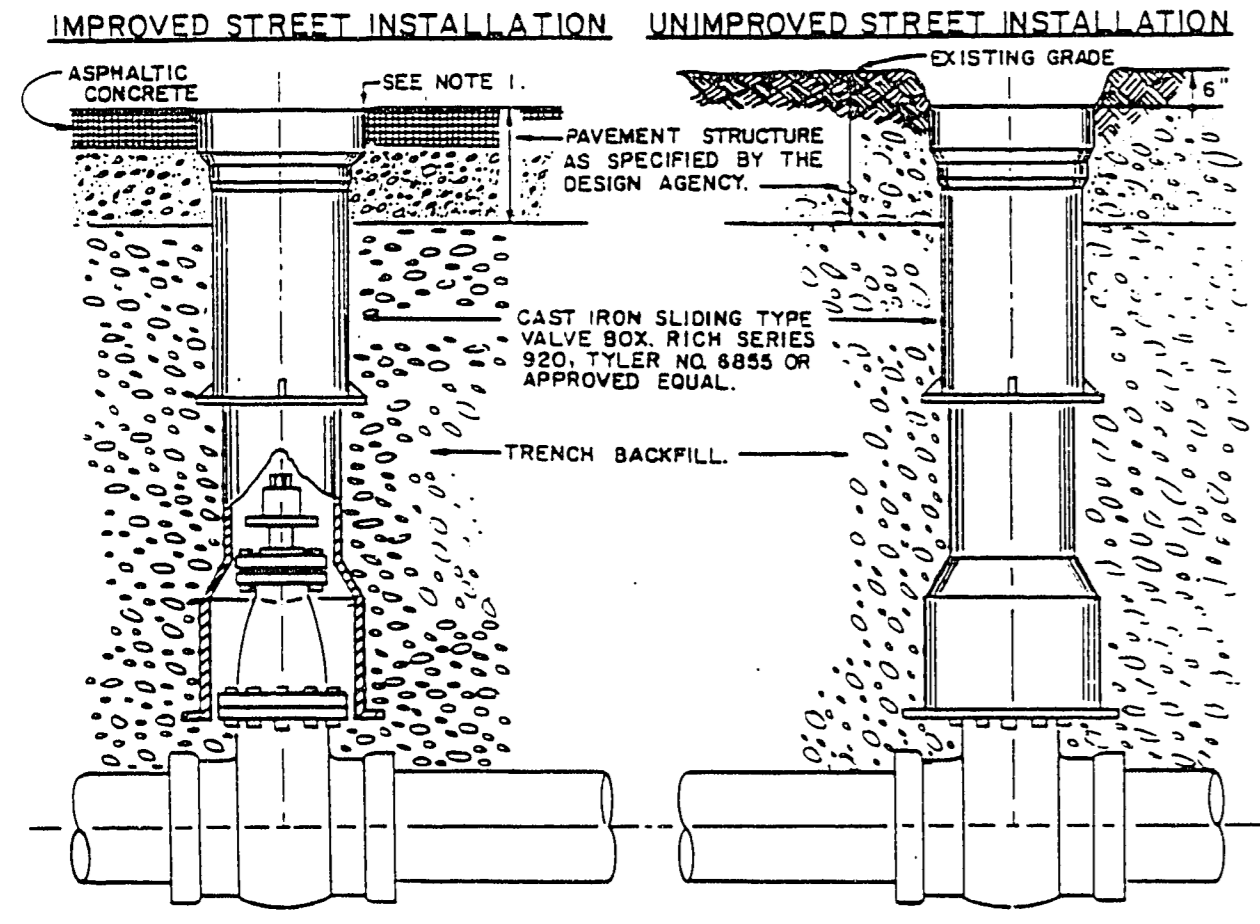
NOTE:
SEE SHEET 2 OF 2 FOR DETAILS OF HORIZONTAL LOCATION OF FIRE HYDRANTS, AND FIRE HYDRANT PADS.



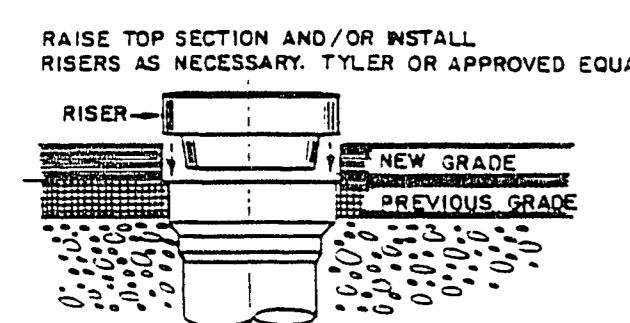
PAD DETAIL



HYDRANT ASSEMBLY DETAIL
N.T.S.

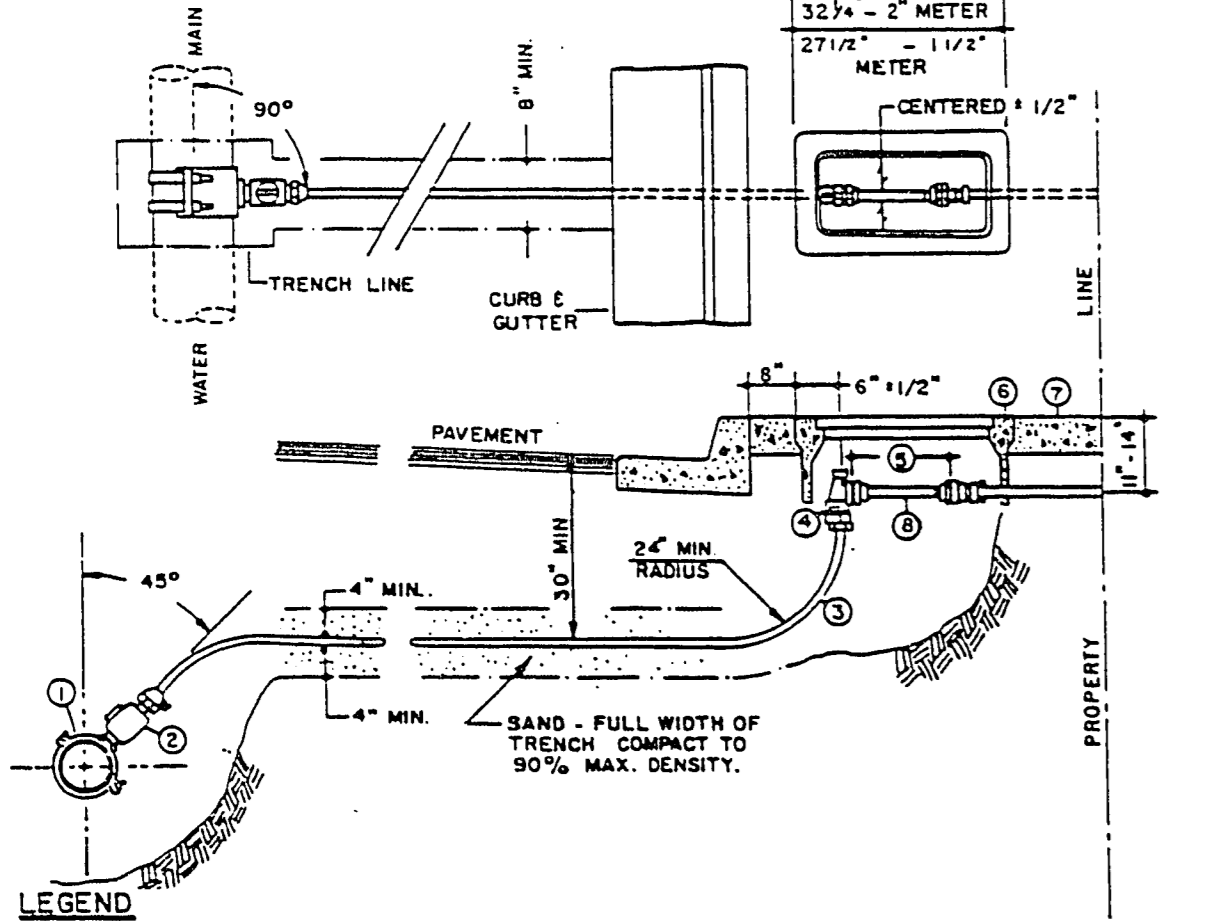


ADJUSTMENT



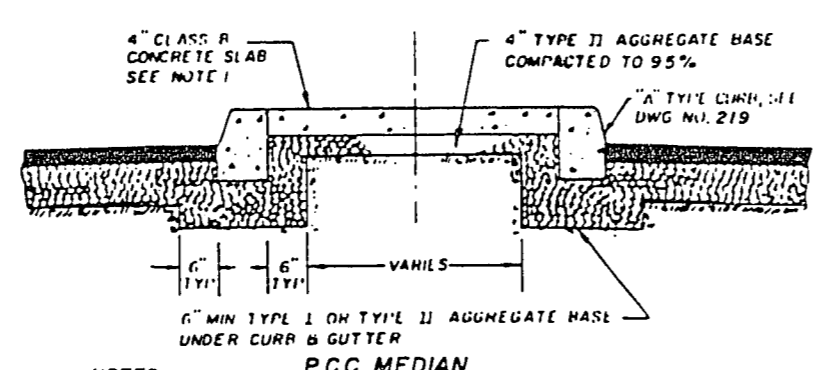
NOTE:
1. FINAL RIM ELEVATION TO BE 1/8" TO 1/4" BELOW FINAL STREET GRADE.
2. MORE STRINGENT INSTALLATION REQUIREMENTS MAY BE IMPOSED BY THE ENTITY HAVING JURISDICTION OF THE LOCATION OF THE VALVE BOX INSTALLATION.

WATER VALVE DETAIL
N.T.S.

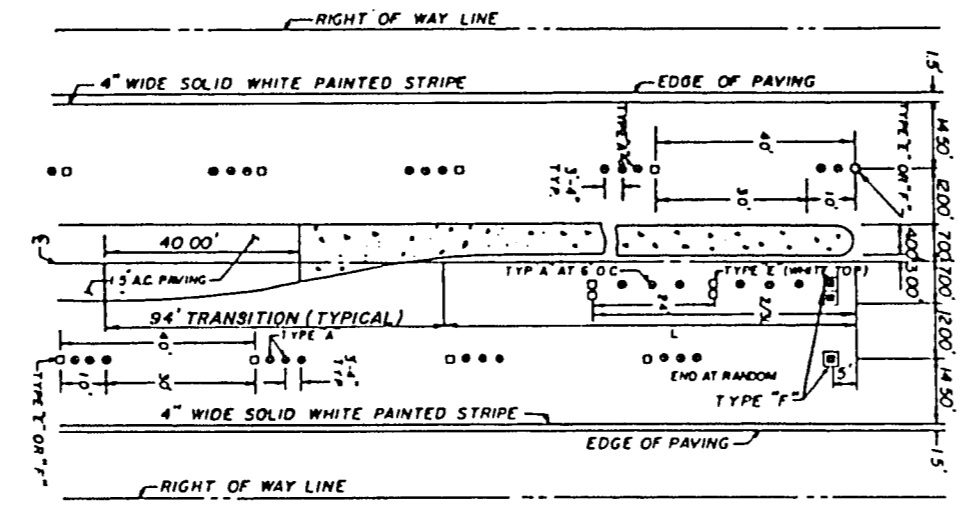


- LEGEND**
- ① DOUBLE STRAP BRONZE SERVICE SADDLE
 - ② CORPORATION STOP
 - ③ POLYETHYLENE SERVICE LATERAL (IRON PIPE SIZE)
 - ④ ANGLE METER STOP RE PIPE PACK JOINT (IRON PIPE SIZE), W/LOCK WING AND W/O LEVER HANDLE.
 - ⑤ IDLER LENGTH
 - ⑥ METER BOX (Hinged Reading Lid not acceptable)
 - ⑦ IDLER (FLANGE & FLANGE) INSTALLED LEVEL, MAX. 1/2" DEVIATION
 - ⑧ SERVICE LATERAL SIZE
 - ⑨ IDLER LENGTH

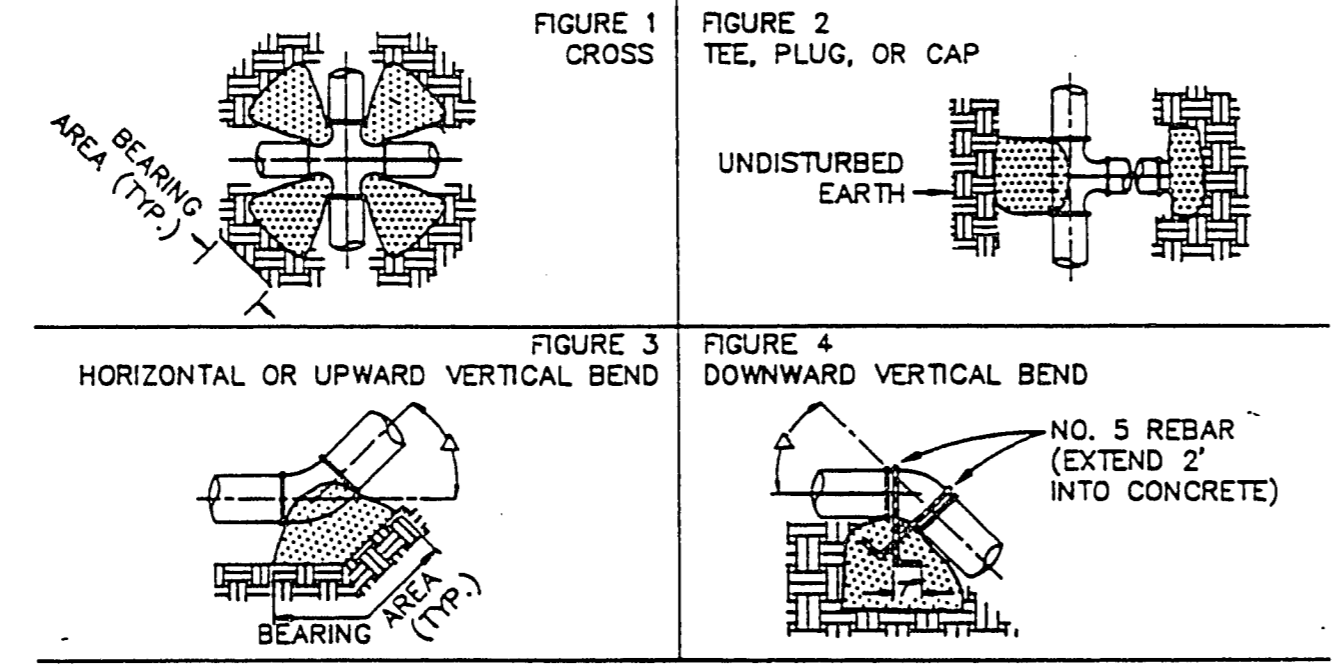
WATER METER DETAIL (N.T.S.)



MEDIAN ISLAND TYPICAL SECTION
N.T.S.



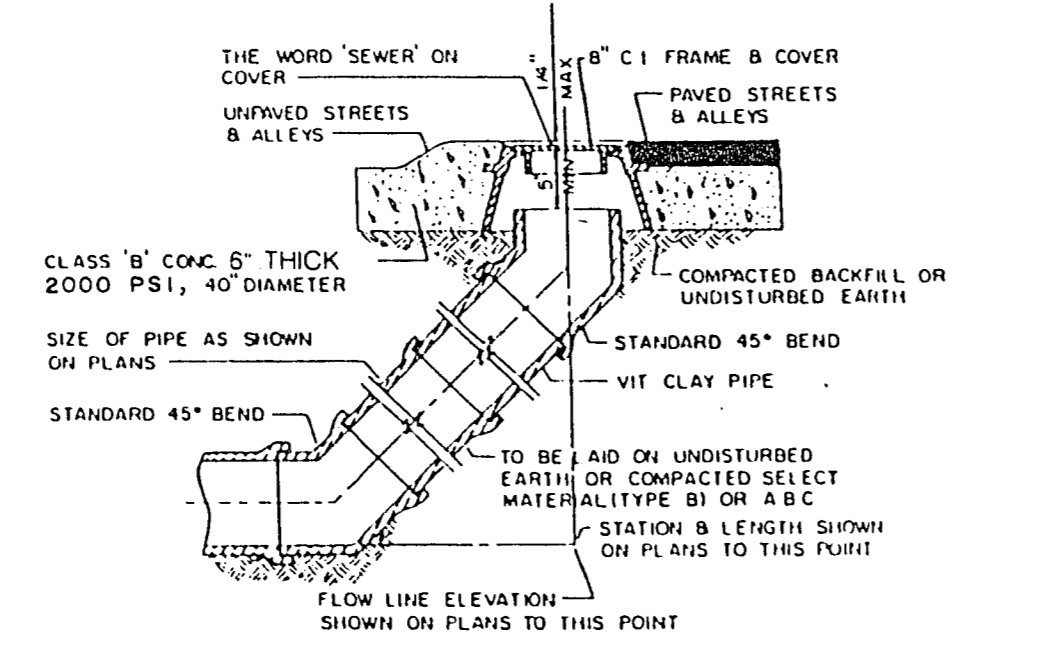
TYPICAL LEFT TURN LANE
N.T.S.



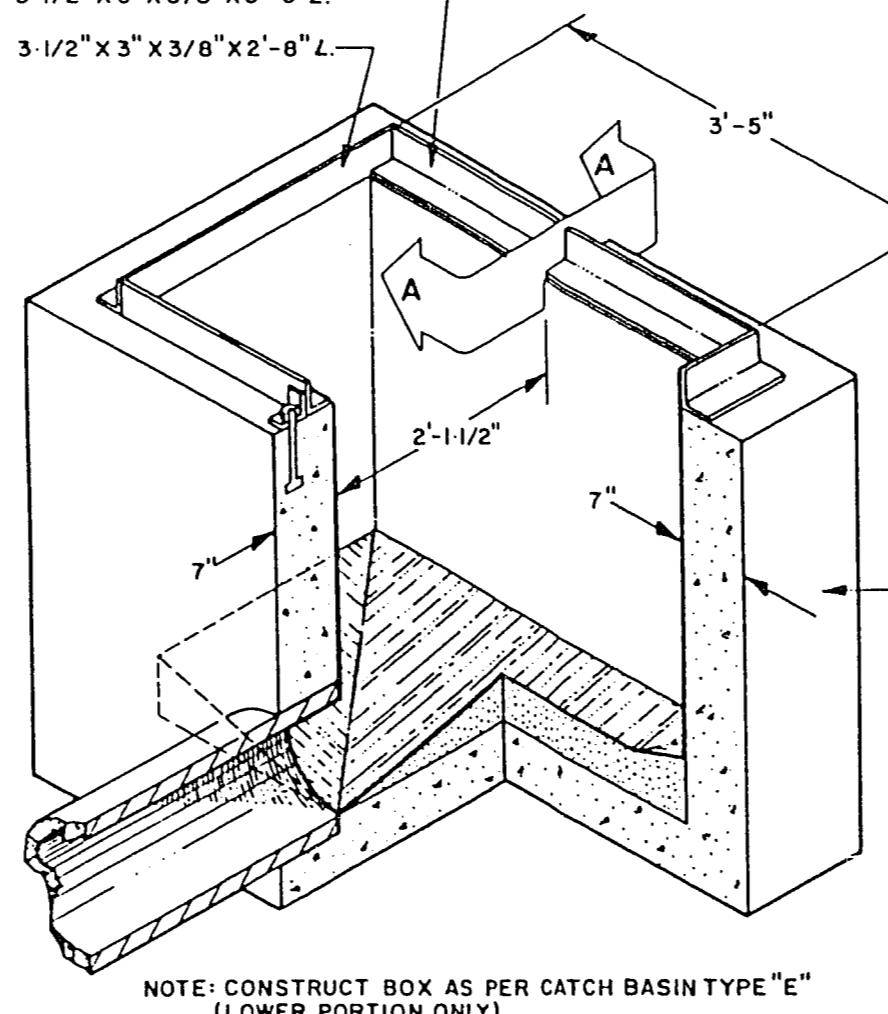
GENERAL NOTES: ALL FITTINGS AND EXPOSED REBAR TO BE COATED WITH EC244 AND WRAPPED WITH TWO LAYERS OF 6 MIL POLYETHYLENE (SEE L.V.V.W.D. SPECIFICATIONS SECTION 1503). ALL CONCRETE SHALL BE 2000 PSI MINIMUM 28 DAYS COMPRESSIVE STRENGTH (SEE L.V.V.W.D. SPECIFICATIONS SECTION 1606). CONCRETE IS TO BE PLACED AGAINST UNDISTURBED EARTH. TABLE BELOW DENOTES MINIMUM BEARING AREA OR VOLUME OF THRU BLOCK. SPECIAL DESIGN FOR EACH INSTALLATION IS REQUIRED IF ALLOWABLE SOIL BEARING CAPACITY IS LESS THAN 3000 P.S.F. ALL VERTICAL SURFACES NOT BEARING AGAINST UNDISTURBED EARTH SHALL BE FORMED.

PIPE I.D.	BEARING AREA IN SQUARE FEET				CONC./CU.YDS.			
	FIGURE 1	FIGURE 2	FIGURE 3	FIGURE 4	FIGURE 1	FIGURE 2	FIGURE 3	FIGURE 4
4"	2	2	2	1	1.0	0.5	0.5	0.5
6"	2	3	3	2	1.5	1.0	0.5	0.5
8"	2	5	6	3	2.0	1.0	0.5	0.5
10"	3	7	10	5	3.0	2.0	1.0	1.0
12"	3	10	14	8	4.0	2.0	1.0	1.0
14"	4	14	20	10	5.0	3.0	1.0	1.0
16"	4	20	24	12	7.0	4.0	1.0	1.0
18"	5	24	30	16	10.0	5.0	1.0	1.0
20"	5	28	40	20	12.0	6.0	1.0	1.0

THRUST BLOCK DETAIL
N.T.S.

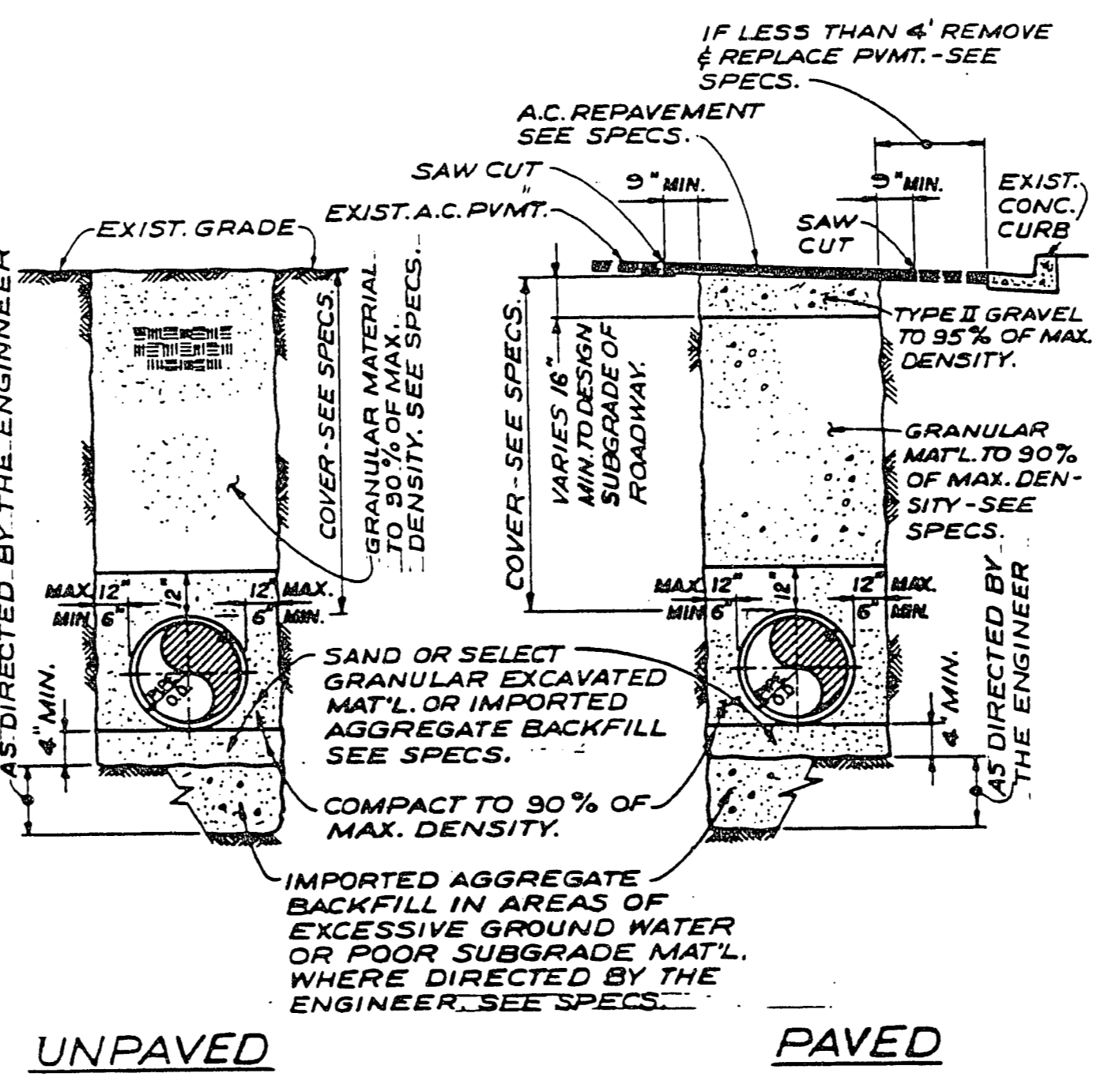


CLEANOUT DETAIL
N.T.S.



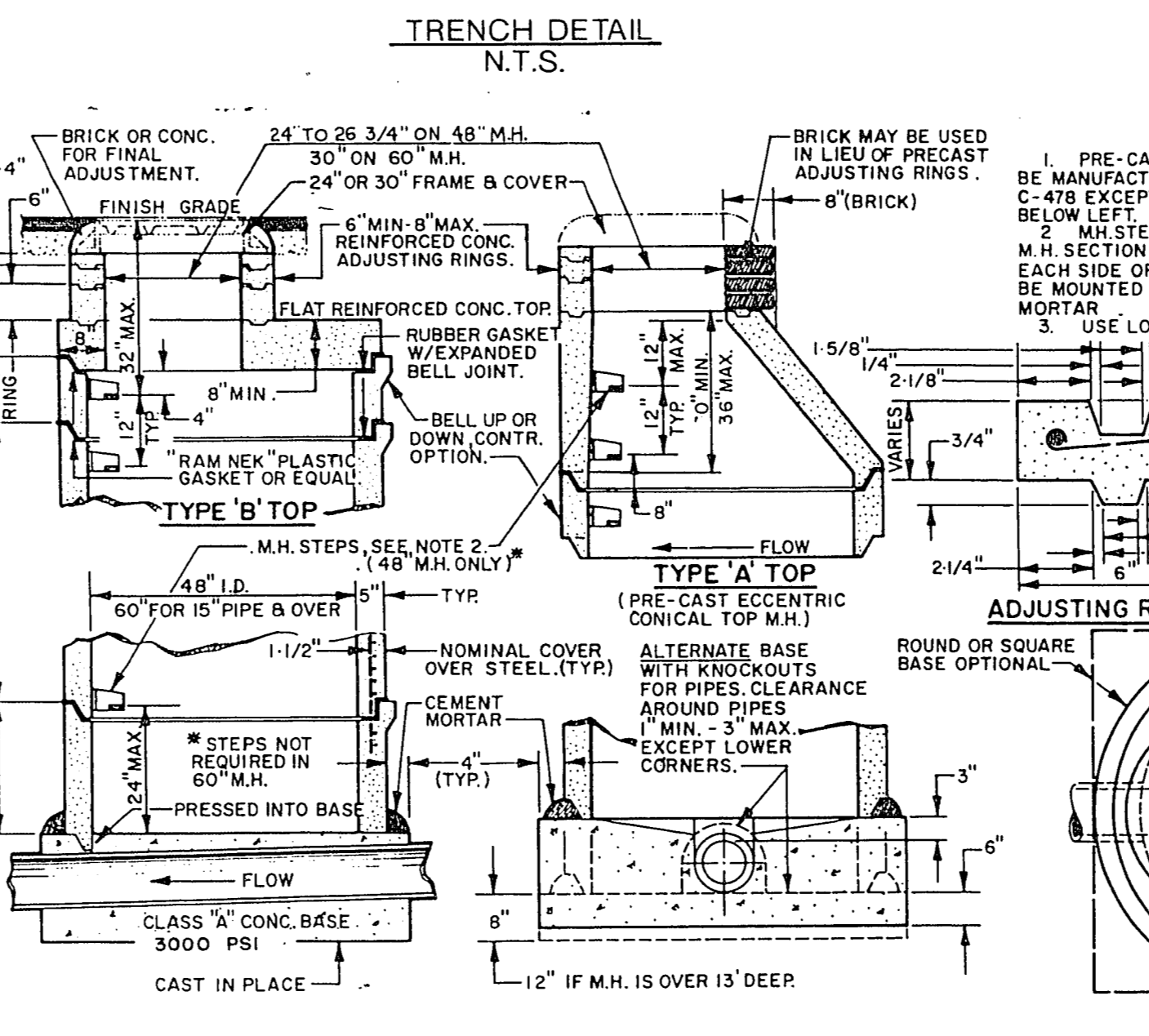
NOTE: CONSTRUCT BOX AS PER CATCH BASIN TYPE "E" (LOWER PORTION ONLY)

CATCH BASIN DETAIL
N.T.S.

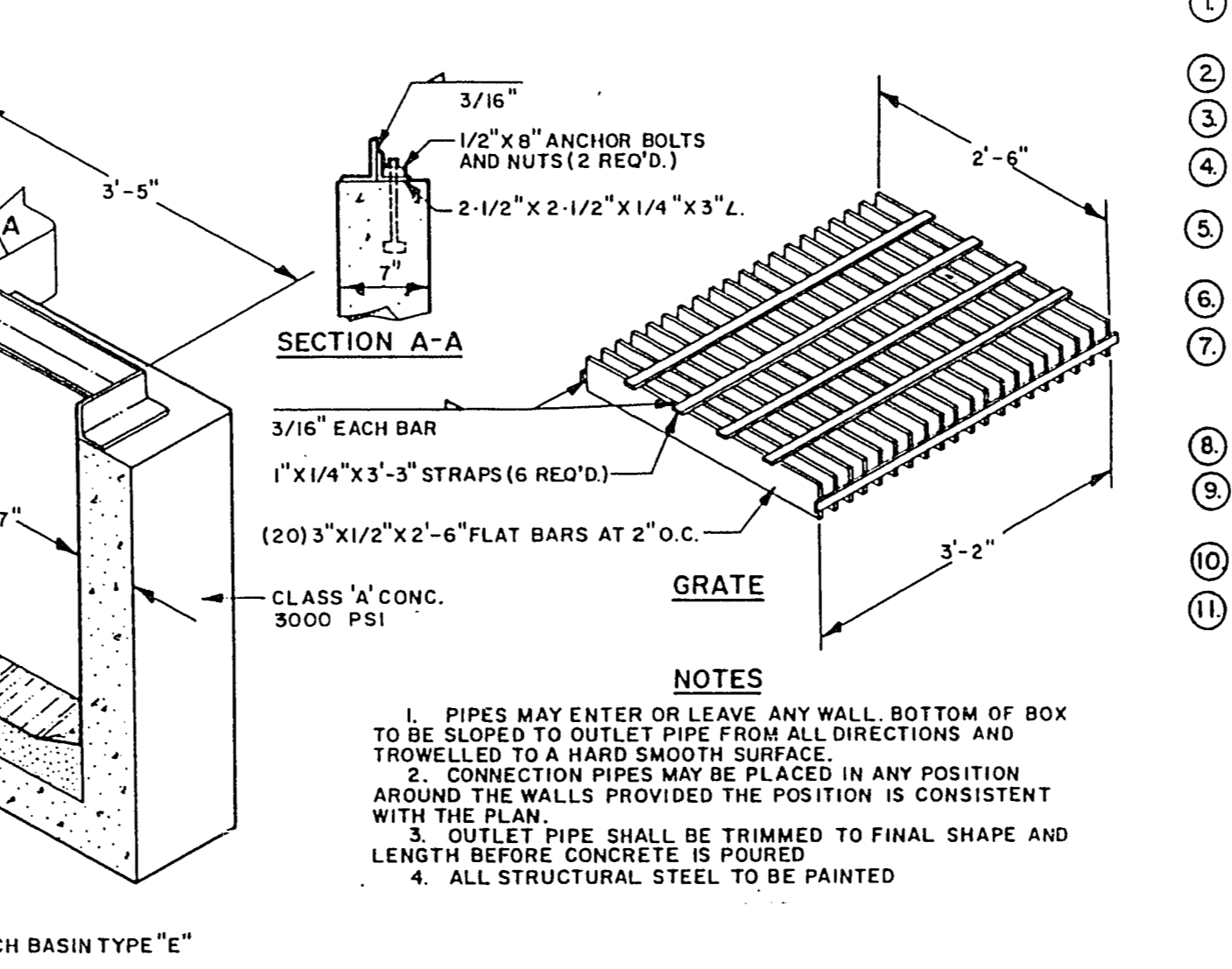


UNPAVED PAVED

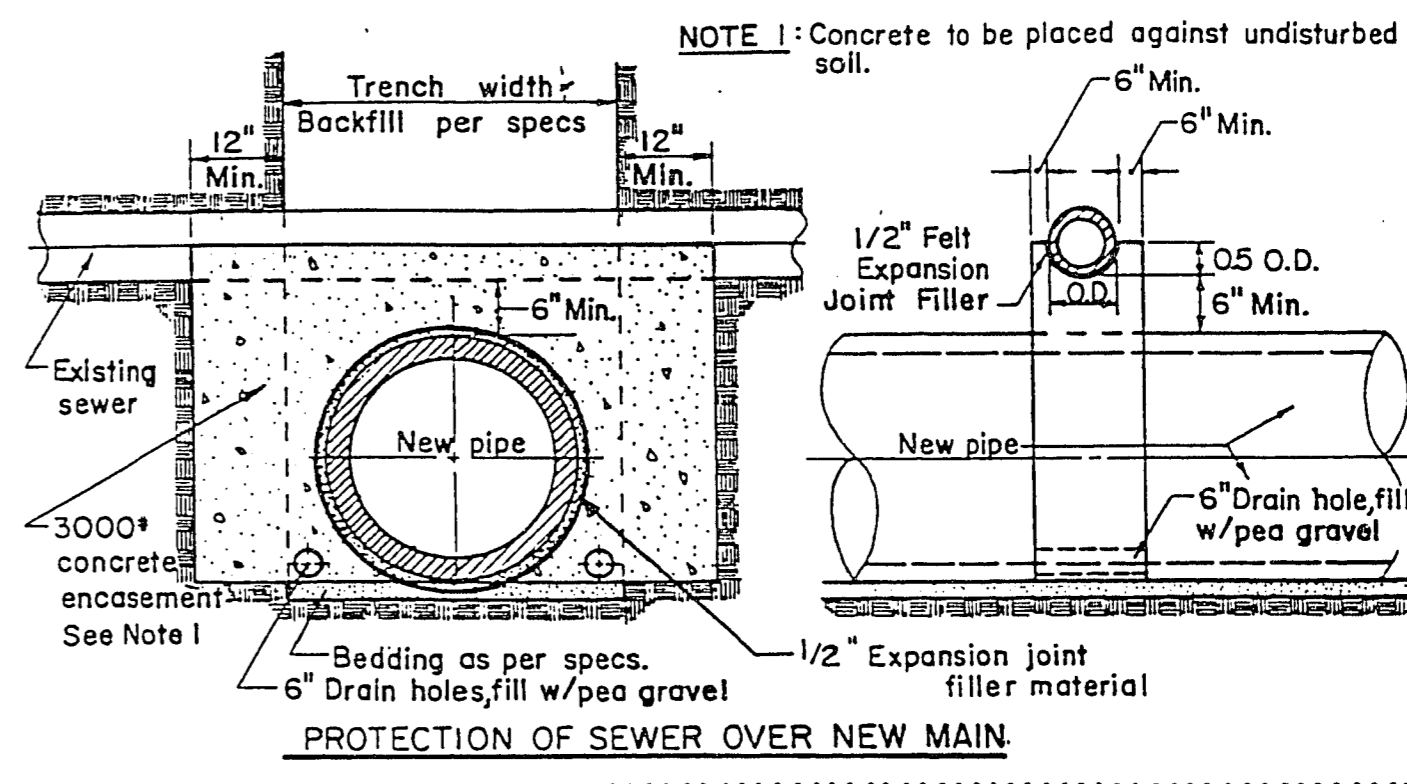
NOTE: THIS FLAT APPLIES TO THE INSTALLATION OF ALL SERVICE LATERALS. TRENCH WIDTH MINIMUMS DO NOT APPLY TO LATERALS LESS THAN 4".



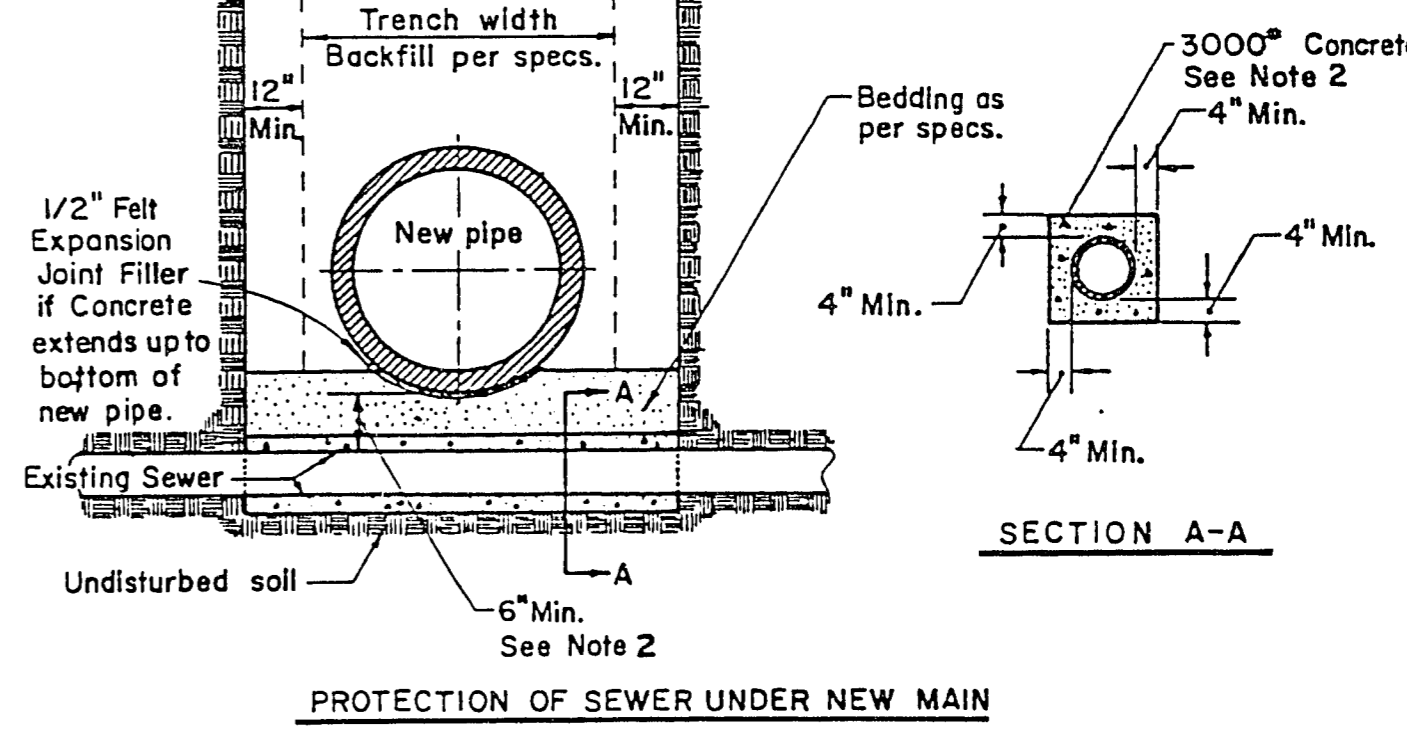
PRE-CAST MANHOLE DETAIL
N.T.S.



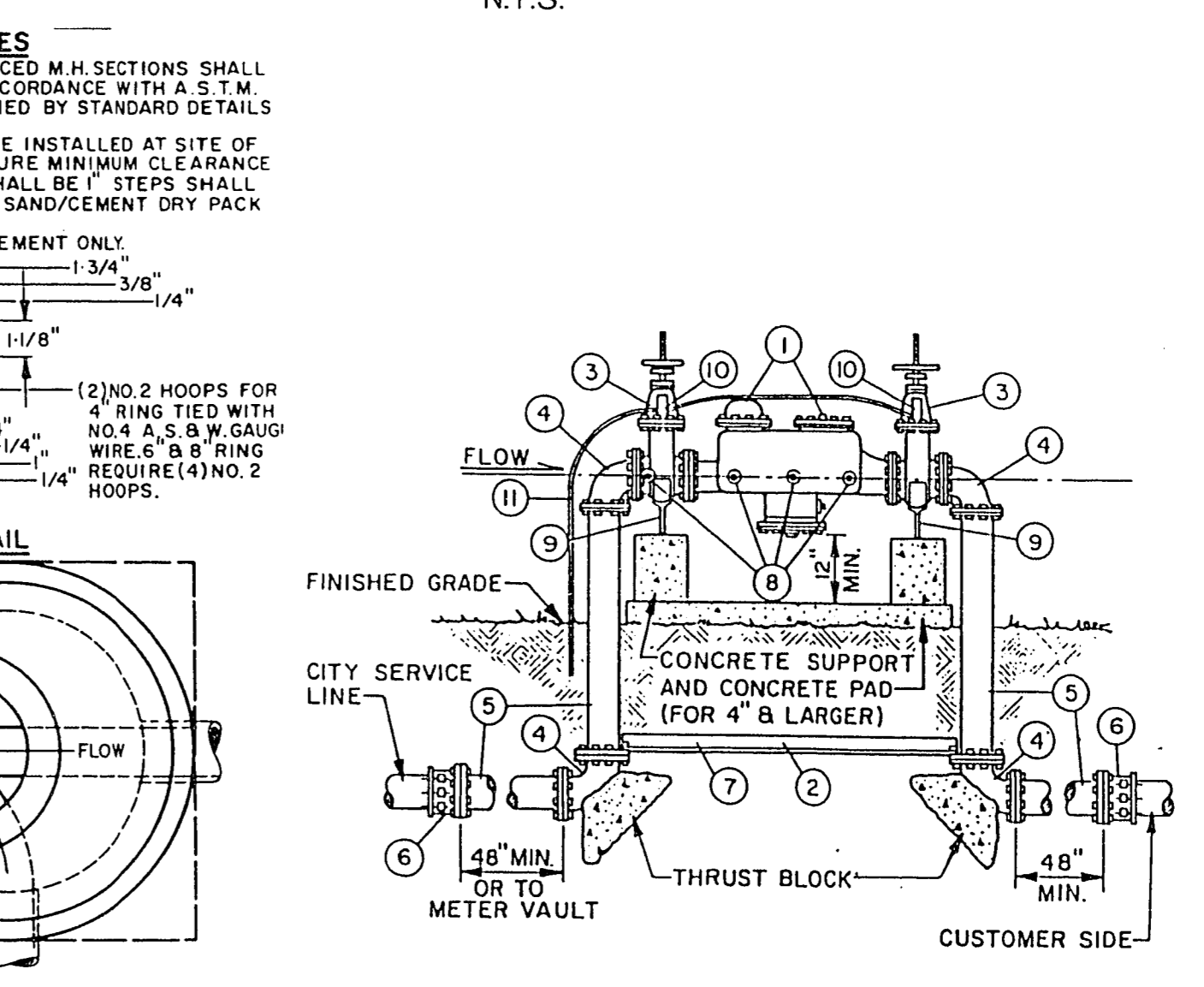
CATCH BASIN DETAIL
N.T.S.



PROTECTION OF SEWER OVER NEW MAIN



PROTECTION OF SEWER UNDER NEW MAIN



REDUCED PRESSURE PRINCIPLE DEVICE

- ① APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE.
- ② COAT WITH COAL TAR EPOXY (16 MILS.)
- ③ O.S.B.Y. GATE VALVE
- ④ 90° ELL (FLANGED C.I.P. 3" THRU 10") OR (TYPE "K" COPPER 3/4" THRU 4")
- ⑤ PIPE SPOOL (FLANGED C.I.P. 3" THRU 10") OR (TYPE "K" COPPER 3/4" THRU 4")
- ⑥ FLANGED ADAPTER (WHEN REQUIRED).
- ⑦ 3" x 3" x 1/4" STEEL ANGLE (FOR 4" & LARGER ASSEMBLY ONLY) BOLT TO FLANGE EACH END WITH ONE BOLT.
- ⑧ TEST COCK (4 REQUIRED).
- ⑨ ADJUSTABLE PIPE SUPPORT (FOR 4" & LARGER ASSEMBLY ONLY).
- ⑩ TAMPER SWITCH (ON FIRE LINE ONLY)
- ⑪ ELECTRICAL CONDUIT FOR TAMPER SWITCH (FIRE LINE ONLY).

BACKFLOW PREVENTION DEVICE
N.T.S.

NO.	DATE	REVISION DESCRIPTION
1	1/25/90	REVISED PER WAL-MART
2	1/28/90	RELOCATE W-M BLDG 5 EAST
3	2/1/90	REVISED PER WAL-MART
4	4/11/90	

DATE: 2/5/90

DATE:

DETAIL SHEET

WAL-MART

NELLIS AND CHARLESTON

DUNAWAY ASSOCIATES WEST INC
ENGINEERS
LANDSCAPE ARCHITECTS
PLANNERS

PHOENIX, AZ
FORT WORTH, TX
ONTARIO, CA

4500 S. LAKESHORE DRIVE
SUITE 215
TEMPE, ARIZONA 85282

(602) 345-0883 FAX (602) 491-2581

JOB NO.	8921900
DESIGN BY:	PLN
CHECKED BY:	FSW
DATE:	JAN 1990
SCALE:	AS SHOWN
SHEET 78 OF 103 SHEETS	

107V1796
28-3-88