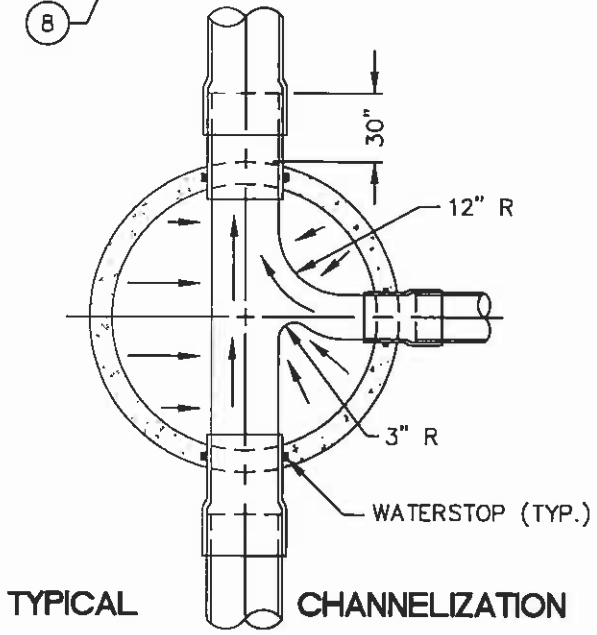


DETAIL 'A'




TYPICAL CHANNELIZATION

- ① FRAME AND COVER, D & L SUPPLY 1024 MARKED "SANITARY SEWER" WITH PICK HOLE.
- ② CLASS "A" CONCRETE COLLAR WITH 2" A.C.
- ③ STANDARD TWENTY FOUR (24) INCH DIAMETER MANHOLE GRADE RINGS THREE (3) INCH MINIMUM, EIGHTEEN (18) INCH MAXIMUM NECK HEIGHT FROM CONE TO FINISH GRADE.
- ④ STANDARD FORTY EIGHT (48) INCH ECCENTRIC MANHOLE REDUCER CONE. COPOLYMER POLYPROPYLENE STEPS REQUIRED FOR MANHOLES DEEPER THAN THREE (3) FEET.
- ⑤ STANDARD FORTY EIGHT (48) INCH DIAMETER MANHOLE BARREL SECTION, CONFORMING TO ASTM C478 - LATEST REVISION WITH FOUR (4) INCH MINIMUM WALL THICKNESS. COPOLYMER POLYPROPYLENE STEPS REQUIRED FOR MANHOLES MORE THAN THREE (3) FEET DEEP.
- ⑥ CLASS "A", CAST-IN-PLACE OR PRECAST CONCRETE BASE.
- ⑦ SIX (6) INCHES MINIMUM, 3/4 INCH CRUSHED ROCK PER ASTM D448 #67.
- ⑧ UNDISTURBED SOIL.
- ⑨ PIPE SHALL HAVE AT LEAST ONE JOINT WITHIN TWO AND A HALF (2 1/2) FEET FROM MANHOLE WALL.
- ⑩ CONNECTIONS TO MANHOLE SHALL BE MADE BY UTILIZING MANHOLE ADAPTERS OR ELASTOMERIC SEAL RINGS EMBEDDED IN THE CONCRETE.
- ⑪ BARREL SECTION JOINTS SHALL BE SEALED BY PRE-FORMED PLASTIC SEALING GASKETS THAT CONFORM TO FEDERAL SPECIFICATION SS-S-00210.
- ⑫ MANHOLES DEEPER THAN SEVEN (7) FEET (INVERT TO FINISHED GRADE) SHALL HAVE #4 REBAR TWELVE (12) INCHES ON CENTER, EACH WAY, IN MANHOLE BASE.
- ⑬ FOUR (4) INCHES PER FOOT MINIMUM SLOPE.
- ⑭ ALL JOINTS SHALL BE MORTARED INSIDE AND OUTSIDE OF MANHOLE.
- ⑮ ALL SEWER MANHOLES ON TRUNK LINES 10" AND GREATER IN DIAMETER SHALL BE LINED PER THE REQUIREMENTS SET FORTH IN DIVISION IV, SECTION 14.02G.

- NOTES:**
- A. COUNTRY OF ORIGIN SHALL BE CLEARLY AND PERMANENTLY SHOWN ON TOP SURFACE OF THE FRAME AND COVER IN ACCORDANCE WITH THE TRADE AND TARIFF ACT OF 1984.
 - B. DATE OF MANUFACTURE SHALL BE CLEARLY AND PERMANENTLY INDICATED ON THE COVER AND THE TOP OF THE FRAME.
 - C. SEATING SURFACE SHALL BE CLOSELY MACHINED TO NOMINAL DIMENSIONS WITH TOLERANCES NOT TO EXCEED $\pm 1/64$ INCH.
 - D. THE WEIGHT OF THE FRAME SHALL BE 140lbs., ± 10 lbs.
 - E. THE WEIGHT OF THE COVER SHALL BE 130lbs., ± 5 lbs.
 - F. VACUUM TEST REQUIRED PER DIVISION IV, SECTION 14.03D.
 - G. SANITARY "SEWER" SHALL BE STAMPED CLEARLY AND PERMANENTLY ON THE COVER.

THE CITY OF WEST SACRAMENTO - STANDARD DETAIL

APPROVED BY: 	C-38733	3/31/05
CITY ENGINEER	P.E. NO.	DATE
REVISION:		
REVISION:		
REVISION:		
REVISION:		

TITLE: **SEWER MANHOLE**

STANDARD DETAIL #: 404

