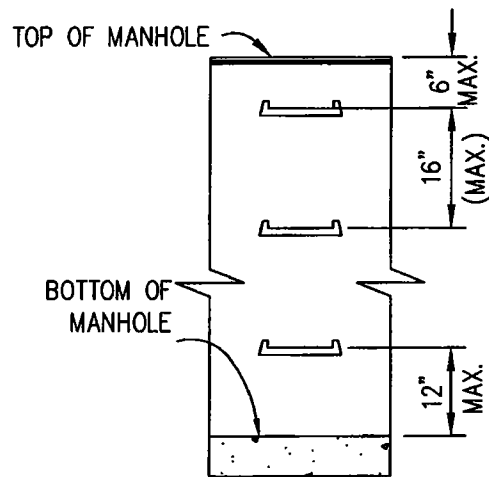


**TYPICAL CAST IRON  
EXTENSION RING**

SEE NOTE 7



**STEP DETAIL**

SEE NOTE 8

**NOTES**

1. ALL REINFORCED CONCRETE SHALL BE CLASS "2" (590 LBS. PC PER CUBIC YARD).
2. ALL CONCRETE JOINTS SHALL BE CLEANED, WETTED, AND MORTARED PRIOR TO SETTING NEXT SECTION. JOINTS SHALL THEN BE PATCHED, TROWELED, AND BRUSHED SMOOTH.
3. TYPE I MANHOLE BASES ARE FOR USE WITH PIPES TO 24" IN DIAMETER AND WHERE THERE IS SUFFICIENT COVER TO USE MINIMUM LENGTH MANHOLE BARREL, ECCENTRIC CONE AND COVER FRAME. TYPE II MANHOLE BASES (STD. PLAN CD-408) ARE FOR USE WITH PIPES TO 42" IN DIAMETER. TYPE III MANHOLE BASES (STD. PLAN CD-409) ARE FOR USE WITH PIPES TO 60" IN DIAMETER. MANHOLE BASES FOR PIPES LARGER THAN 60" IN DIAMETER SHALL REQUIRE A SPECIAL DESIGN.
4. FRAME AND EXTENSION RINGS MUST BE SECURED BY PAVEMENT OR CONCRETE BLOCK.
5. MANHOLE COVER FRAME SHALL BE ADJUSTED TO CONFORM TO GRADE AND CROSS SLOPE OF PAVEMENT.
6. MANHOLE FRAME AND COVER SHALL BE PHOENIX IRON (OAKLAND) MODEL P-1090 OR SOUTH BAY FOUNDRY (LODI) MODEL A-640 OR APPROVED EQUIVALENT.
7. USE OF EXTENSION RINGS IS LIMITED BY 18" MAXIMUM MANHOLE THROAT LENGTH. EXTENSION RINGS ARE ALLOWED FOR CONFORMS TO PAVEMENT OVERLAYS ONLY.
8. STEPS SHALL BE STEEL REINFORCED POLYPROPYLENE PLASTIC, SANTA ROSA CAST PRODUCTS CO. DWG. NO. PS2-PF OR EQUIVILANT. STEPS TO BE CAST IN PLACE OR PRESS FITTED INTO PROVIDED HOLES AS PER MANUFACTURER. INSTALL STEPS WITH LOWEST RUNG 1'-0" ABOVE THE FLOOR AND HIGHEST RUNG NOT MORE THAN 6" BELOW TOP OF MANHOLE. THE SPACING BETWEEN STEPS SHALL NOT EXCEED 1'-0" AND SHALL BE UNIFORM THROUGHOUT THE LENGTH OF THE WALL. PLACE STEPS IN THE WALL WITHOUT A PIPE OPENING. NO STEPS REQUIRED WHERE DISTANCE FROM FLOOR OF MANHOLE TO TOP OF MANHOLE IS LESS THAN 2'-6".



**PRECAST MANHOLE, TYPE I BASE, FRAME & COVER**

SCALE: NOT TO SCALE

DATE: SEPTEMBER 13, 2006

DRAWN BY: LDH

V: \CAD\NEW STANDARDS

APPROVED:

*[Signature]*  
PUBLIC WORKS DIRECTOR

SHEET 3 OF 3

**CD-407**