

## NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING SEWER AND OTHER UTILITIES, PROPER BACKFILLING, COMPACTING, AND MEET ALL RESTORATION REQUIREMENTS OF THE AGENCY, CITY, OR DISTRICT WHERE THE MANHOLE IS INSTALLED. CONTRACTOR MUST COORDINATE ANY ADDITIONAL INSTALLATION OR INSPECTION REQUIREMENTS WITH THE DISTRICT.
- PLACE AND COMPACT BACKFILL EQUALLY AROUND MANHOLE AND GRADE RINGS. BACKFILL WITH FLOWABLE FILL IF MANHOLE RISER OR CONE SECTIONS ARE EXPOSED OR ABOVE GRADE.
- WHERE ADJUSTING EXISTING MANHOLE FRAME, COVER, AND GRADE RINGS TO FINISHED GRADE, GRADE RINGS MUST BE REPLACED-IN-KIND UNLESS OTHERWISE REQUIRED BY THE DISTRICT.
- 4. MINIMUM MANHOLE DIAMETER SHALL BE PER DISTRICT AND MANUFACTURER REQUIREMENTS. MANHOLES AND THEIR BASES SHALL BE PRECAST CIRCULAR POLYMER CONCRETE DESIGNED, FABRICATED, AND TESTED TO MEET OR EXCEED THE REQUIREMENTS OF ASTM D6783. APPROVED MANUFACTURER - ARMOROCK.
- MANHOLE JOINTS SHALL BE WATERTIGHT AND SHALL MEET ALL MANUFACTURER REQUIREMENTS.
- INVERTS OF CONNECTING PIPE SHALL MATCH THE CROWN OF EXISTING DISTRICT PIPE. PRECAST BENCH AND CHANNEL SHALL BE SHAPED TO FORM A SMOOTH FLOW SURFACE.
- MANHOLE/PIPE CONNECTIONS MUST BE WATER-TIGHT. PROVIDE FLEXIBLE, BOOTED PIPE CONNECTIONS WITH MIN 2xSST BANDS ON PIPE PER BOOT PER ASTM C923.
- GRADE RINGS SHALL BE POLYMER OR EPP. EPP GRADE RINGS SHALL BE SPIKED OR PINNED TO PREVENT MOVEMENT DURING BACKFILLING. GRADE RINGS AND FRAME MUST BE RAISED TO GRADE NO LATER THAN 2 WEEKS AFTER MANHOLE INSTALL ATION
- 9. OPENING SHALL BE CENTERED OVER CHANNEL.
- 10. WHERE USED, CONCRETE SHALL BE TYPE II/V PORTLAND CEMENT PER ASTM C150 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI PER ASTM C39. NO ADDITIVES SHALL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE DISTRICT. CONCRETE SHALL BE PROVIDED IN A SINGLE MONOLITHIC POUR.

NORTH DAVIS SEWER DISTRICT

**Standard Manhole Detail**