

1. MANHOLE BASE(S) SHALL BE PRECAST UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER OR THEIR DESIGNEE. NO FIELD MODIFICATIONS TO PRECAST BASES WILL BE ALLOWED. TROUGHS AND BENCHES TO BE CAST IN BASE(S) AT PRECAST FACTORY. BASE CONFIGURATION TO BE INSTALLED AS SHOWN ON THE APPROVED PLANS. NO PLUGGING OR FIELD MODIFYING ALLOWED.
2. PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C478.
3. ARRANGE MANHOLE SECTION LENGTHS TO FIT DEPTH. ALL SHIMS TO BE REMOVED AND VOIDS GROUTED.
4. PIPES SHALL NOT PROTRUDE MORE THAN 3 INCHES INSIDE MANHOLE SECTION, AS MEASURED FROM THE INSIDE WALL AT THE SPRINGLINE OF THE PIPE.
5. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 OF THE SSPWC.
6. PRECAST MANHOLE SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE PLASTIC GASKET MATERIAL SUCH AS "RAM-NEK" OR APPROVED EQUAL AS PER MANUFACTURER'S RECOMMENDATIONS.
7. EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED IN SECTION 305 OF THE SSPWC. (SEE DRAWING C-1.2.1)
8. NO SEWER LINE PIPE WITH A DIAMETER OF LESS THAN 8 INCHES SHALL BE CONNECTED TO A MANHOLE WITHOUT THE APPROVAL OF THE CITY ENGINEER OR THEIR DESIGNEE.
9. MATCH PIPE INVERTS TO MANHOLE INVERTS WHERE PIPES CONNECT TO MANHOLE BASE.
10. ALL MANHOLES SHALL BE SEALED WATERTIGHT. COVERS SHALL HAVE NO "THRU" HOLES. CLOSED PICK HOLES ONLY: D & L FOUNDRY A-1024 OR APPROVED EQUAL.
11. COAT OUTSIDE OF SEWER MANHOLE WITH FLEXIBLE RUBBERIZED COATING WHEN GROUNDWATER IS ENCOUNTERED.
12. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER THE REQUIREMENTS OF ASTM C1244.

1 13. MANHOLE VACUUM TESTING SHALL REQUIRE THAT A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 INCHES. THE MANHOLE SHALL PASS IF THE TIME IS GREATER THAN 60 SECONDS FOR 48 INCH DIAMETER, 75 SECONDS FOR 60 INCH DIAMETER AND 90 SECONDS FOR 72 INCH DIAMETER MANHOLES UP TO 22 FEET DEEP. IF MANHOLE DEPTH IS GREATER THAN 22 FEET, THE MANHOLE SHALL PASS IF THE TIME IS EQUAL TO OR GREATER THAN THE MINIMUM TEST TIME AS SPECIFIED IN ASTM C1244.

14. NO STEPS, LADDERS OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN MANHOLES.
15. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE A 12 FOOT MINIMUM WIDTH ALL-WEATHER ACCESS ROADWAY CONSISTING OF 6 INCH TYPE 2, CLASS B AGGREGATE BASE (CONFORMING TO THE SSPWC SECTION 200.01.03) DENSIFIED TO 95% RELATIVE COMPACTION AND SEWER MANHOLE MARKERS SHALL BE INSTALLED. SEWER MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (CRM306607), 66 INCHES WITH MANHOLE DECAL (7339CSM811) OR APPROVED EQUAL. PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE CITY ENGINEER OR THEIR DESIGNEE.
16. WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION WITH A KOR-N-SEAL I & II WEDGE TYPE PIPE-TO-MANHOLE CONNECTOR, A LINK-SEAL MODULAR SEAL, OR APPROVED EQUAL.

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
1	NOTE 13,15,16	4/25	SEWER MANHOLE NOTES	CARSON CITY
				DRAWING NO.
				C-2.1.2
				DATE
APPROVED BY:	<u>DA</u>	4/25		APR 2025