NOTES:

1. TYPE VI MANHOLE TO BE UTILIZED FOR PIPE DIAMETERS OF 30" THROUGH 60" AND DEPTHS NOT EXCEEDING 20 FEET.

2. LATERAL PIPE CONFIGURATIONS SHALL NOT EXCEED 12" DIAMETER. ANY CONFIGURATION WITH LARGER DIAMETERS OR GREATER DEPTH SHALL REQUIRE A SEPARATE DETAIL.

3. ALL PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478

4. FOR 30" PIPE DIAMETERS, MANHOLE COMPONENTS SHALL CONFORM TO TYPE I MANHOLES. FOR ALL OTHER DIAMETERS, MANHOLE COMPONENTS SHALL CONFORM TO TYPE V MANHOLES.

5. PIPE CONNECTION TO MANHOLE SHALL BE WATERTIGHT PER STANDARD DETAILS R-223A, R-223B AND R-223C.

6. MANHOLE BASE SHALL BE PORTLAND CEMENT CONCRETE (P.C.C.) AND SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS. ALL CEMENT CONCRETE SHALL HAVE A COARSE AGGREGATE GRADATIONS CONFORMING TO SIZE No. 67. POLYPROPELENE OR CELLULOSE FIBERS SHALL BE ADDED TO THE P.C.C. AT 1.5 LBS PER CUBIC YARD. MIX DESIGN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337.10 OF SSPWC. ALL MATERIALS SHALL CONFORM TO SSPWC.

7. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATIONS.

8. PRECAST MANHOLE SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE GASKET MATERIAL SUCH AS "RAM-NEK" OR EQUAL AS PER MANUFACTURER'S RECOMMENDATIONS.

9. EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED FOR "TRENCH EXCAVATION AND BACKFILL" IN SECTION 305 OF THE STANDARD SPECIFICATIONS.

10. EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE IF SOIL CONDITIONS REQUIRE) IN EXISTING STREET SECTIONS, ALLEY SECTIONS, AND CONFINED AREAS, SUCH AS LIMITED EASEMENTS OR ADJACENT STRUCTURES.

11. MANHOLE PRECAST SECTION LENGTH SHALL BE ARRANGED TO FIT THE REQUIRED DEPTH.

12. NO LATERALS OR PIPES LESS THAN 8" IN DIAMETER SHALL BE CONNECTED TO THE MANHOLE.

13. ALL MANHOLES SHALL BE WATERTIGHT.

14. THE USE OF FLAT TOP MANHOLE CONES REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER.

15. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER ASTM C-1244.

16. NO STEPS, LADDERS, OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN THE MANHOLE.

17. REINFORCING STEEL SHALL BE AS SHOWN, WIRED TIGHTLY AT ALL INTERSECTIONS AND EMBEDDED AT LEAST 3" CLEAR, UNLESS OTHERWISE NOTED.

18. WHEN PIPE CONNECTIONS TO EXISTING MANHOLES ARE ALLOWED, THEY SHALL BE MADE BY CORE DRILLING THE MANHOLE AND CONNECTING THE PIPE PENETRATION PER DETAIL R-223A & R-223B.

| | STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION | DRAWING No. |
|---|---|---|
| RENO | # NOTES - MANHOLE TYPE VI - LARGE DIAMETER PIPE | R-210B |
| | | APPROVED BY: KK \| DATE: 2/2026 |