

1. MANHOLE AND CATCH BASIN MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE SSPWC.
2. MARKING TAPE SHALL BE INSTALLED 12 INCHES ABOVE ALL STORM DRAIN PIPE. TAPE WIDTH SHALL BE 3 INCHES; THICKNESS SHALL BE FOUR (4) MIL OR GREATER AND SHALL BE GREEN AND BEAR LARGE PRINTING DENOTING "CAUTION BURIED STORM DRAIN LINE BELOW" OR EQUIVALENT WORDING.
3. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MIN. COMPRESSIVE STRENGTH @ 28 DAYS, (CURB AND GUTTER TRANSITION ONLY, ALL UNEXPOSED CONCRETE MAY BE 3000 PSI) MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH A MAX. WATER/CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO SSPWC SECTION 202.
4. REINFORCING STEEL SHALL BE GRADE 40 AND HAVE 1.5 INCHES MINIMUM CLEAR COVER.
5. EACH CATCH BASIN SHALL HAVE A 4 INCH ALUMINUM BLUE DISK WITH FISH IMAGE AND THE WORDS "NO DUMPING! DRAINS TO RIVER" (ALMETEK SD-4 OR APPROVED EQUAL) INSTALLED ON THE TOP OF THE CURB BOX.
6. FRAMES AND GRATES SHALL BE MATCHED TO ACHIEVE A CLOSE TOLERANCE FIT, WITH MINIMAL GAPS, AS APPROVED BY THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.
7. STORM DRAINAGE IMPROVEMENTS SHALL INCORPORATE WATER QUALITY AND EROSION CONTROLS IN ACCORDANCE WITH CARSON CITY DEVELOPMENT STANDARDS-DIVISION 13, "EROSION & SEDIMENT CONTROL".
8. PRECAST MANHOLES SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE PLASTIC GASKET MATERIAL SUCH AS RAM-NEK OR APPROVED EQUAL PER MANUFACTURERS RECOMMENDATIONS.
9. TRACER WIRE SHALL BE ATTACHED TO ANY STORM DRAIN LATERAL WHICH IS NOT PERPENDICULAR TO THE STORM DRAIN MAIN.
10. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE ALL WEATHER ACCESS ROADWAY CONSISTING OF 6 INCHES TYPE 2, CLASS B AGGREGATE BASE (CONFORMING TO THE SSPWC SECTION 200.01.02) AND STORM DRAIN MANHOLE MARKERS BE INSTALLED. STORM DRAIN MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (CUM 375), 5 FEET-2 INCHES (5'-2") WITH DECAL READING "STORM DRAIN MANHOLE". PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE CARSON CITY ENGINEER OR PUBLIC WORKS DIRECTOR.
11. MANHOLE CONCRETE COLLARS SHALL BE LEFT 2 1/2 INCHES TO 3 INCHES BELOW FINISHED ASPHALT SURFACE. APPLY AN APPROVED TACK COAT (CONFORMING TO THE SSPWC SECTION 316) AND FILL VOID BETWEEN ADJACENT PAVEMENT AND FRAME WITH TYPE 3 AC 20 PAVING (CONFORMING TO THE SSPWC SECTION 320). APPLY FOG SEAL (CONFORMING TO SSPWC SECTION 317) TO THE ASPHALT SURFACE. ALL CUTS IN PAVING SHALL BE STRAIGHT AND EVEN. EXCEPTION: WHEN STRUCTURE NOT LOCATED IN ASPHALT PAVEMENT OR LOCATED IN AN UNPAVED AREA, EXTEND CONCRETE TO FINISH GRADE.
12. GRATES SHALL BE PLACED OUTSIDE OF THE PEDESTRIAN TRAVELED WAY. GRATE OPENINGS SHALL NOT EXCEED 0.5 INCHES IN WIDTH OR 4 INCHES IN LENGTH. GRATES SHALL BE TRAFFIC RATED AND ADA COMPLIANT.
13. THE MATERIAL AND SHAPE OF THE STORM DRAIN SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION". USE ROUND, ELLIPTICAL, SQUARE, OR RECTANGULAR REINFORCED CONCRETE PIPE (RCP) IN ACCORDANCE WITH ASTM C-789 OR C-850 UNDER ROADWAYS, DRIVEWAYS, AND OTHER TRAFFIC AREAS. RCP SHALL BE CLASS III (OR GREATER WHEN DESIGN DICTATES). OTHER PIPE MATERIALS MAY BE PERMITTED, AS APPROVED BY THE CITY FOR STORM DRAIN USE, EXCEPT FOR CORRUGATED METAL PIPE (CMP) WHICH ARE ONLY PERMITTED FOR RESIDENTIAL DRIVEWAY CULVERTS.



NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION
1	NOTE 13	3/22	STORM DRAIN GENERAL NOTES	CARSON CITY
				DRAWING NO. C-4.1.1
				DATE MAR 2022
APPROVED BY:		3/22		