Clark County Water Reclamation DISTRICT

Design and Construction Standards for Wastewater Collection Systems

Clark County Water Reclamation District (CCWRD) Addendum for Recreational Splash Pad Sewer Connections

Adopted June 21, 2011, by the Clark County Water Reclamation District Board of Trustees, with Section 1, Item 6 as read into the record at the public hearing.

GENERAL STATEMENT:

This addendum provides the design and construction standards for recreational splash pads within the Design and Construction Standards for Wastewater Collection Systems (DCSWCS).

This addendum only addresses splash pad connections to sanitary sewer lines, and does not apply to splash pad connections into storm drains. Where discrepancies exist between the requirements of DCSWCS and this addendum, this addendum shall apply. If not amended by this addendum, the requirements as specified in DCSWCS shall apply.

SECTION 1 - ENGINEERING AND PLANNING CONTROLS:

These requirements are to prevent the inflow into the sanitary sewer in conformance with EPA best management practices, and to ensure downstream capacity in the District's collection system for the splash pad jets at peak flow.

1. Manufacturer's plans for the splash pad equipment, with certified flow rates for each fixture/jet must be reviewed and approved by District staff prior to start of construction. The splash pad peak flow rate with all fixtures flowing will be used to determine capacity in the downstream sewer main. If the maximum peak flow rate allowed by the site water meter/backflow assembly is less than the all-jets-flowing flow rate, this flow may be used instead.
2. District staff will review the peak flow rate of the splash pad equipment, and by mutual agreement with the developer's engineer, determine the maximum allowable sewer lateral size for the splash pad site. This maximum size will

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have capacity to serve only the peak fixture/jet flows without any excess capacity for inflow. This size restriction is only for the non-domestic wastewater from the splash pad, and does not apply to discharge from the restrooms or any other park facilities.

3. District staff will determine a point of connection for the park sewer lateral based on total peak flow rate for all combined park facilities.
4. The splash pad perimeter must be elevated to prevent run-on from the surrounding terrain.
5. An appropriately sized sand-oil separator shall be installed in the splash pad sewer lateral, meeting all requirements of the Uniform Plumbing Code section 1016.1.1 and 1016.1.2, and applicable Clark County code.
6. If all other listed engineering and planning controls contained in this section cannot be met at a proposed site, the District may require that the splash pad drain into the sewer lateral be equipped with an automated rain-detecting valve that closes the sewer connection when rainfall is detected. The automated valve must be designed so that manual opening is required after an automatic shutoff event. This option may only be used with prior approval by CCWRD.
7. The splash pad drain shall have a means of diverting rainwater flows into storm drain or surface drainage.
8. The water supply line for the splash pad must be equipped with a separate water meter that is accessible to District staff. This meter is not a Las Vegas Valley Water District meter and does not need to conform to the billing meter requirements of the Uniform Design and Construction Standards (UDACS).
9. Offsite civil improvement plans must be reviewed and approved by District staff prior to start of construction of any on-site sewer facilities. All sewer facilities must be designed and constructed in conformance with all current District design criteria.
10. Construction of the splash pad sewer connection must be inspected by District Developer Inspections staff.

11. As required for all developer projects, connection fees must to be paid prior to start of construction.
12. A written agreement will be required granting District right-of-entry to service, inspect, and/or maintain the water meter, rain-detecting valve, and other related components of the splash pad sewer connection.

SECTION 2 - METHOD FOR SIZING SPLASH PAD CONNECTIONS

1. Engineer shall submit flow calculations from the splash equipment manufacturer meeting these requirements:
    a. Detailed breakdown of equipment used, with associated flow rates
    b. Calculated peak flow in gallons per minute with all jets active
    c. Calculated average flow in gallons per day
    d. Annual flow in gallons per year based on a 90 day season
    e. Flows to be certified by the manufacturer
2. District staff will provide Engineer with pipe ID sizing for the splash pad sewer connection, based on the peak flow provided on the manufacturer's calculations. District staff will also determine the point-of-connection into the public sewer with available capacity to receive the peak flow, and provide that information to the Engineer.
3. Engineer shall submit P.E. stamped plans showing the splash pad, a dedicated water supply meter for District purposes, sand-oil interceptor, size-restricted lateral, and all on-site and off-site sewer facilities, in accordance with current District design criteria, including the splash pad addendum.
4. District will determine an equivalent residential unit (ERU) count for connection fees and annual charges based on the average (non-peak) annual flow provided on the manufacturer's calculations, with a 30% reduction for evaporation.

5. After two years of operation, the District will review the total cumulative flow based on the dedicated water supply meter, and adjust the average annual charges accordingly. Connection fees for existing splash pads will not be changed retroactively.