## **Sewer Design Criteria & Engineering Information**

## **Design Criteria:**

• For ADEQ forms and the engineer's sewer design report, the following wastewater planning factors should be used to calculate the Base Design Flow:

Residential	Commercial
2.7 persons per housing unit 80 gallons per person per day 216 gallons per housing unit per day	Base Design Flow, Peak Dry Weather Flow, and Peak Wet Weather Flow per R18-9-E301

 Design criteria per PCRWRD Engineering Design Standards, except as modified by Town requirements.

## **General Sewer Notes:**

- The plan set shall include the RWRD 104 trenching and bedding detail.
- The following items shall be included within the General Sewer Notes section:
  - 1. MARANA SEWER GENERAL NOTES AND STANDARD DETAILS SHEET SHALL BE AN INTEGRAL PART OF THIS CONTRACT.
  - 2. IN ACCORDANCE WITH R18-9-E301(D)(2)(c) SEWER LINES AND RELATED PARTS SHALL NOT CROSS OR BE LOCATED IN THE FLOOD ZONE AREA PER FEMA AND STATE STATUTE.
  - 3. IN ACCORDANCE WITH R18-9-E301(D)(5)(d) MANHOLE COVERS ARE DESIGNED TO RESTRICT OR ELIMINATE STORM WATER RUNOFF IN AREAS SUBJECTED TO MORE THAN INCIDENTAL RAINFALL.
  - 4. IN ACCORDANCE WITH R18-9-E301(D)(2)(i) FLEXIBLE GRAVITY SEWER LINES MUST BE DEFLECTION-TESTED.
  - 5. IN ACCORDANCE WITH R18-9-E301(D)(2)(j) SEWER LINES MUST BE LEAKAGE-TESTED (ASTM F1417 FOR PVC GRAVITY SEWER MAINS, ETC.).
  - 6. IN ACCORDANCE WITH R18-9-E301(D)(2)(k) SEWER LINES WILL HAVE A UNIFORM SLOPE TEST.
  - 7. IN ACCORDANCE WITH R18-9-E301(D)(3)(e) MANHOLES SHALL BE LEAKAGE TESTED PER ASTM C1244.
  - 8. IN ACCORDANCE WITH R18-9-E301(D)(2)(e) THE PROPOSED SEWER COLLECTION SYSTEM AND DRINKING WATER SYSTEM COMPONENTS SHALL MEET SEPARATION REQUIREMENTS PER A.A.C., ARTICLE 5.
  - 9. IN ACCORDANCE WITH R18-9-E-301(D)(2)(b) THE MINIMUM SEWER BURIAL DEPTH SHALL BE 3 (THREE) FEET.

## Completing Notice of Intent to Discharge (Sewage Collection System 4.01 General Permit) Form:

- Section 4 requires the Downstream Collection System ADEQ File Number. Please note that ADEQ is currently requesting copies of the Construction Authorization or Discharge Authorization forms for the downstream collection system.
- Marana's Collection System O&M Manual is not yet on file with ADEQ. The design engineer must attach a copy of the O&M Manual provided by the Town to the Notice of Intent application.