

# SANITARY SEWER QUALITY ASSURANCE

## Air Test for Leakage

- 1) The air test for leakage shall be used on all gravity sewer pipes unless otherwise noted.
- 2) The pressure used shall be 5 psi greater than the back pressure of the ground water above the pipe.
- 3) The section being tested shall be pressurized and allowed to equalize. The time duration of the test will be 5 minutes after equalization.
- 4) The test section shall pass if the pressure loss is 1 psi or less.

## Manhole Vacuum Testing

- 1) A vacuum test will be performed on all newly installed manholes, or existing manholes that the contractor penetrated for tie in.
- 2) The test shall be conducted after all manhole components have been assembled, and pipe penetrations have been made.
- 3) A vacuum of 10 inches of Hg shall be drawn and the vacuum pump turned off. The time duration of the test will be 1 minute.
- 4) The test manhole shall pass if the vacuum loss is 1 inch of Hg or less.

## In Place Deflection Test

- 1) The in place deflection test shall be performed on all gravity sewer pipes unless otherwise noted.
- 2) The test shall be conducted after the final backfill has been in place for a minimum of 30 days.
- 3) The test shall be conducted using an approved mandrel having a diameter equal to 95% of the I.D. of the pipe being tested.
- 4) A proving ring with factory identification clearly visible shall be provided for each mandrel used.
- 5) The mandrel shall be manually pulled thru each pipe section being tested, without the use of any mechanical devices.
- 6) The section being tested shall pass if the mandrel can be pulled continuously thru the pipe.

City of Carmel Utilities Standard Details		Title: QUALITY ASSURANCE
Date: January 2016	Scale: Not To Scale	Drawing: CS 2
		Page 4