

**VALLECITOS WATER DISTRICT  
SEQUENCE OF  
WATER AND SEWER INSPECTIONS**

**I. PRIOR TO ANY CONSTRUCTION**

- A. Signed construction agreement.
- B. Capacity fees paid - water and sewer.
- C. Inspection fees paid.
- D. Bonds Issued.
- E. Three approved (signed) sets of prints.
- F. All easement documents approved and recorded.

**II SEWER INSPECTION**

- A. Two copies of the cut sheets.
- B. Pothole survey information to be turned in prior to construction to verify line and grade.
- C. No stakes - no digging, no inspections (4 ft cover min.).
- D. Straight line trenches: Main and laterals
- E. 3/4"crushed rock bedding: Main and laterals
- F. Pipe zone backfill: Minimum one foot above top of pipe. Sand on DIP. 3/4" crushed rock on PVC. 3/4" crushed rock on VCP (no mounding).
- G. Backfill: Nothing back in the trench over six inches (must meet the requirements of current City of San Marcos Excavation Ordinance or governing agencies standards).
- H. Sewer laterals staked with I.E. cut and line stake at P/L. Manholes staked (in and out).
- I. The sewer laterals shall be of the same material as the mainline
- J. Provide Cal OSHA confined space permit entry program.

**III WATER INSPECTION**

- A. Submit valve information for entire project.
- B. Pothole survey information to be turned in prior to construction to verify line and grade.
- C. Two copies of the cut sheets.
- D. No stakes - no digging, no inspections. (2ft cover min.).
- E. Ductile iron pipe: Plastic wrapped in trench.
- F. Pipe zone backfill: Minimum one foot above top of pipe. Sand on DIP. Crushed 3/4" rock on CML&C. - Sand SE 30% or better-Certification ticket required- No mounding.
- G. Backfill: Nothing back in the trench over six inches (must meet the requirements of current City of San Marcos excavation ordinance No. 81-544 or governing agencies standards)
- H. Service runs: Ninety-degrees from the main. Cul-de-sac requires stakes at main and P/L.
- I. Services falling in sidewalks require over sizing of meter boxes.
- J. Cutting, sawing and drilling of AC pipe is not permitted.
- K. Ductile iron pipe shall be used for closures.
- L. Shutdowns: Tuesdays, Wednesdays or Thursdays only or as approved by VWD Engineer.
- M. Shutdown request-Minimum six working day's notice in writing .
- N. Inspect all waterlines exposed during installation of joint trench utilities.

#### IV TESTING

- A. Inspect all sewer lines exposed during installation of joint trench utilities.
- B. Sewer air test- 3 PSI for 3 Minutes (no loss)-after all joint trench utilities are installed and compacted.
- C. Wayne Ball: Mandrel (5%) and flush. Wayne ball water not to enter live sewer system.
- D. TV camera the entire sewer system. Ten days advance notice required for scheduling VWD TV or use of contract TV crew.
- E. House sewer laterals connections: After the sewer air test (VWD to inspect property line private connection)
- F. Wayne Ball and Flush: After paving and manholes are brought up to grade (unless prior arrangements have been made under B and C above).
- G. Water Pressure Test: After all appurtenances are constructed (225 psi for 1hr) or as required by the Engineer.  
Chlorine test: After 24 hours of contact time (100 ppm min.)
- H. Chlorine residual: As soon as the line is flushed.
- I. Bacteria Test: State certified lab to sample and test. 48-hr HPC/ e-coli/coliform:
- J. Contractor / Developer to schedule.(STATE HEALTH REQUIRES ANY PUBLIC WATER SYSTEM TAKEN OUT OF SERVICE MUST BE BACTERIA TESTED UPON REACTIVATION).
- K. Compaction test: 1) easements and, 2) public right-of-way (as directed by soils engineer).
- L. Water meters and boxes set after curbs & sidewalks are in or temporary sidewalk panels.
- M. Raise gate valves to grade after paving.
- N. Paint: Fire hydrants, ARV cans.-see approved material list (FSC Coatings 800-579-8459)

#### V COMPLETION OF THE JOB (LETTER OF RELEASE GIVEN AFTER COMPLETION)

- A. Meter number/Address form completed.
- B. Letter of certification for water and sewer trench compaction.
- C. Until all of the above items are complete, all meters shall be locked off.
- D. Labor material record submitted to VWD. Actual cost of the pipeline (water and sewer). Sample available.
- E. Warranty bond submitted to VWD: 25% of the labor material record (total water and sewer).
- F. As-built photo mylars to VWD with electronic files (ACAD latest version).
- G. Payback documents on file with VWD (if applicable).
- H. Acceptance by the Board of Directors.
- I. Customers sign up for service.

\*\*\* If any work is done after normal working hours or on the weekend, it must be left open for inspection.

\*\*\* Overtime inspections (other than normal working hours) must be arranged with the inspector.