



WG.6: INSPECTION OBSERVATION MINIMUM REQUIREMENTS

The following are guidelines for the minimum inspection requirements for Missoula Water projects. It is suggested that the inspector visit the site at least twice per day. More frequent visits may be appropriate based on the current construction. The following items must be observed during the inspections:

GENERAL

- Bedding (Type as well as depth below and above pipe)
- Materials (pipe, trace wire, location tape, etc)
- Record serial numbers from at least 20% of pipe samples
- Elevations (pipe, hydrants)

PIPE FITTINGS

It is required that the inspector be present to observe the construction and provide appropriate documentation, including photos, for each of the following fittings:

- Valves
- Tees
- Bends
- Blowoffs
- Air relief valves
- Hydrants

At a minimum, photos should be taken before the fitting is wrapped to create a record of the connections and after the tie downs and thrust blocks are in place for future reference as to size and construction. Use a dry-erase board to document the project, location, station, orientation, etc.

At each fitting, it is expected that the following applicable items will be observed and documented:

- Type of connection (flange, MJ, fitting sequence)
- Thrust blocks or other thrust restraint
- Tie-downs
- Drain rock for hydrants

TESTING

The Consultant shall verify that the following types of tests are completed:

- Bedding material gradation
- Proctor tests of backfill material
- Soil compaction testing
- Pressure testing (**Must be observed and documented by inspector**)
- Asphalt testing

ITEMS WHICH SHOULD BE DOCUMENTED ON RECORD DRAWINGS

- Underground utility crossings (document location, size, and relation to water facilities)
- Underground utility service line crossings (document location, size, and relation to water facilities)
- Railroad crossings (casing sizes, types and end locations)
- Modifications to existing water service lines (note materials used and new configuration)