

# Taylorsville Bennion Improvement District Design Standards 

## General

- Plans for sewer and water design shall be prepared on one of the following page sizes: $24^{\prime \prime} \times 36^{\prime \prime}$ or 22"x34"
- Plans for sewer and water design shall be stamped and signed by a licensed engineer in the State of Utah.
- Preferable scale is $1^{\prime \prime}: 20^{\prime}$ - but will accept $1^{\prime \prime}: 30^{\prime}$ where appropriate.
- Plans shall include a scale, north arrow, legend, and a vicinity map. All roads shall be labeled.
- All existing utilities shall be shown and labeled appropriately.
- Applicable TBID standard details shall be incorporated in the plans
- A 20-foot easement is required for sewer mains. A 16-foot easement is required for water mains. All easements shall be in favor of Taylorsville-Bennion Improvement District.
- Construction staking shall be provided per the District's staking requirements.
- Electronic CADD files shall be submitted to the District for the creation of as-builts.
- A grading and drainage plan shall be submitted to evaluate the depth of the waterline.


## Water

- Waterline shall be stationed- where there are multiple waterlines- each line shall be stationed separately with reference to the station of other lines at tie-ins
- All fittings including size, and type (MJ, FL, etc) shall be called out
- The minimum water main line size is 8 -inches.
- Water mains shall be PVC C-900 DR-18
- Label water main size, and material on plans.
- Isolation valves shall be placed at intersections and at no more than 500 foot intervals in residential areas and no more than 800 foot intervals in commercial areas.
- Water mains shall have a minimum of 10 -feet of horizontal clearance from sewer mains and a minimum of 18 -inches of vertical separation with the water being laid above the sewer.
- Water shall be designed with a bury depth of 42-inches to the top of pipe. Where vertical conflicts exist with the waterline, a pre-fab steel loop will be required to be installed.
- Fire hydrants shall be located in accordance with the local fire code official and as required for maintenance- such as for a blow off at the end of dead end lines.
- Site specific geologic factors and soil conditions shall be considered in the design of the waterline including the sizing of thrust blocks.
- Special design is required where waterlines are installed in areas of possible contamination and if a waterline crosses a water body.
- Where possible fittings shall be flanged together.
- Air-relief valves will be required at high points.
- Sewer lines shall be shown in profile
- Sewer line shall be stationed
- All manholes shall be called out with rim and invert elevations. There is to be a $0.2^{\prime}$ drop through every manhole.
- The minimum sewer main size shall be 8 -inches
- Sewer lines shall be PVC SDR35
- Plans shall indicate size, type of pipe material, and proposed grade for all sewer mains.
- Maximum spacing between sewer manholes shall not exceed 400 feet
- Indicated on plans the proposed size and location of all sewer laterals.
- Manholes shall be 48 -inch in diameter, unless the manhole is servicing 3 or more intersecting sewer lines or the sewer lines are 12 -inches or greater, than they shall be 60 -inch.
- Cast-in-place manholes shall be cast with at least $80 \%$ of the full diameter below the skirt/shelf.

