

Bedding Pipe with Open Graded Crushed Limestone

Crushed limestone is used extensively for bedding underground pipe. Typically aggregate with a top size from 1 1/4" to 3/8" is used.

The limestone bedding levels and supports the pipe. Pipe bedding performs for underground pipe what railroad ballast does for railroad tracks. Pipe that operates under pressure (fresh water, natural gas, or diesel fuel), moves as the load and pressure changes. Proper bedding allows the pipe to move slightly without losing position or support.

If the pipe trench is dug through solid rock, the pipe is at risk of wearing a hole where it rubs against sharp rocks in the walls and floor of the trench. Proper washed crushed limestone bedding can shield and protect the pipe from sharp rocks and other high friction areas.

Another advantage that limestone bedding has over backfilling with clay is that limestone bedding does not expand or contract like clay, which can stress the pipe and eventually cause a break in the line.

Limestone bedding also insulates the pipe from soil movement caused by the natural wetting and drying of the earth, traffic from above and other soil distresses surrounding the pipe.

Because open graded crushed limestone does not compact (or expand), the crushed limestone backfill supports pavement or other structures above the pipe. Open graded crushed limestone bedding also provides a place for any moisture from either the pipe or the soil to drain away from the pipe structure. When washed crushed limestone (free of rock fines and free draining) is used to backfill a trench, the requirement to compact backfill is reduced.