

Underground Pipe Extractor

This invention relates to an apparatus and the methods for extracting pipe from beneath the ground.

It is desirable to remove obsolete or out of commission pipe, and in some states, it is mandatory.

The traditional method involves digging along the pipeline and then, in a separate operation, removing the pipe by pulling and cutting into lengths to prevent bends. This practice is extremely time consuming and laborious, not to mention the size of the footprint, damage to landscape, crops, etc. That damage has to be repaired at a fairly high cost and additional time by the company pulling the pipe.

The Pipe Extractor removes pipe by encompassing the pipe on three sides, redistributing the top soil to both sides of the soon to be trench, with a double plow and by loosing the soil above the pipe, allowing the pipe to be deflected upward by means of a ramp. The two steel ripper shanks that extend downward from the above ground structure is typically 2" larger than the diameter of the in-ground pipe, therefore the footprint is minimal. The ramp is 40 feet long allowing the pipe to be removed in a straight piece without bend memory.

Attached to the lifting ramp is a return plow which forces the soil, that falls from the pipe, into the trench and also turns the sod and top soil back to its original place. Compaction follows, resulting in minimal damage to the land.

The machine used to pull the extractor is an articulating steering quadratractor. It moves in idle at 2 mph making the removal process much faster than the digging process, which is an average of 1 mile per day.

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