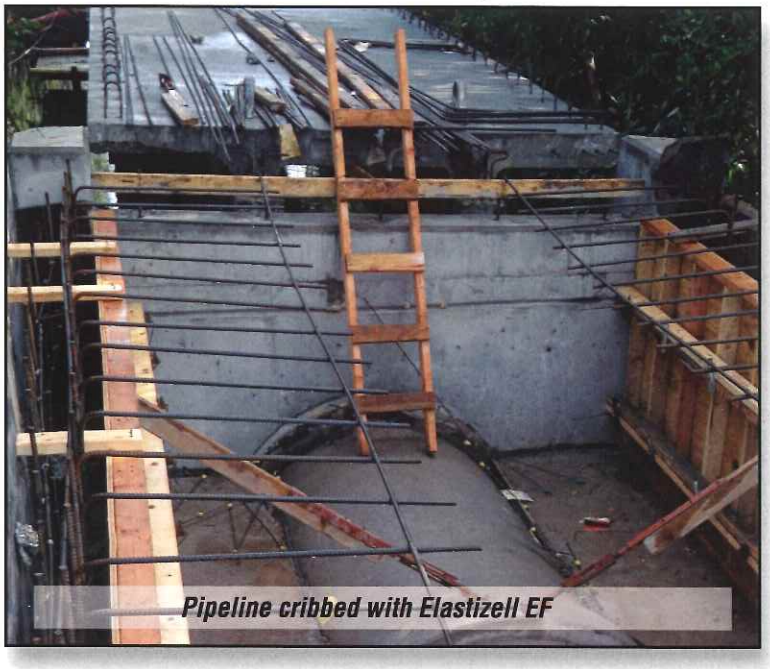
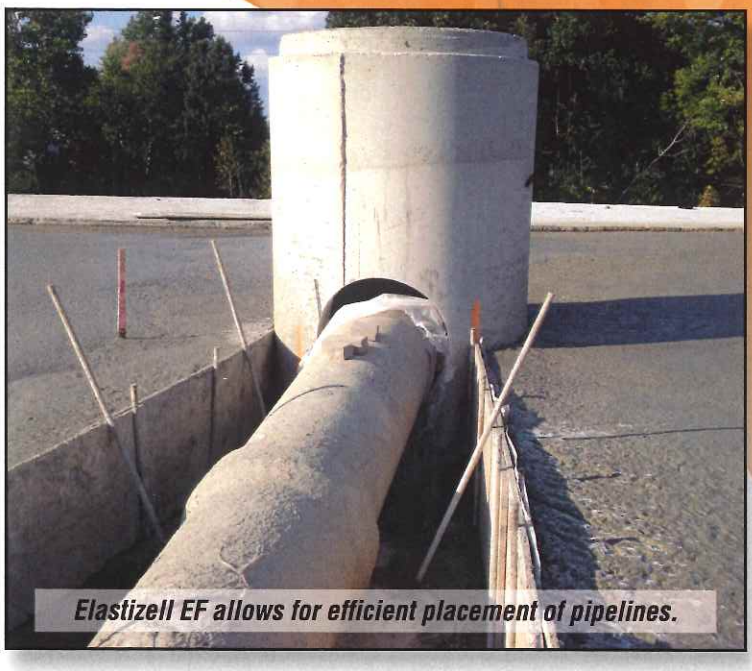
Lightweight Elastizell EF Completely and Safely Fills Voids



Pipeline cribbed with Elastizell EF



Elastizell EF allows for efficient placement of pipelines.

Problem

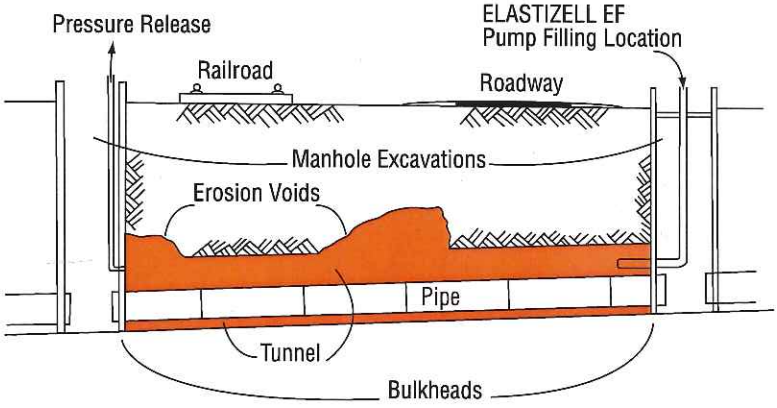
Various types of pipeline construction creates voids that require filling. What is an economical method for filling tunnel voids, abandoned pipelines and sliplined pipe annular spaces?

Discussion

Sliplining an existing pipe is a cost effective way of prolonging the life of the existing utility carrier. However, any remaining voids need to be filled to avoid future settlement and problems.

Pipeline or tank abandonments also need to be completely filled to avoid future liabilities due to cave-ins and collapses. Loading of the abandoned structure needs to be considered, as original design capacity should not be exceeded.

Open excavations require design, inspection and worker protection adding time and expense to projects.



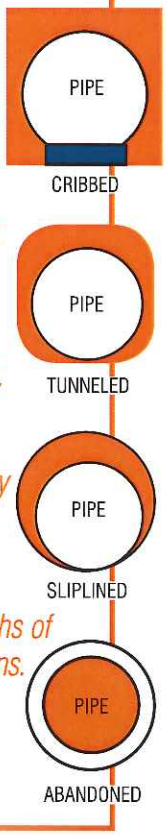
= ELASTIZELL EF

Solution

Elastizell EF is a highly flowable, cementitious material that can be pumped thousands of feet to fill irregular voids. The density and resulting strengths can be designed to meet the required project specifications. Elastizell EF is an excellent fill material for undefined voids created by various methods of underground pipeline construction.

Advantages

- *Elastizell EF is pumped into place to fill the entire void.*
- *Since no workers are in the excavation, it is a safer method for filling voids.*
- *The speed of installation results in this being an economical and competitive method of filling voids.*
- *The high fluidity of Elastizell EF completely fills the void. Elastizell EF has demonstrated flowability of up to 600 feet and the ability to be pumped thousands of feet.*
- *The ability to vary the density and resulting strengths of Elastizell EF enhances its use in numerous applications.*
- *Elastizell EF will not overload poor soils and is stronger than other backfill materials.*



BASIC PHYSICAL PROPERTIES

Elastizell EF

*Greater values may be obtained if required per Elastizell Corporation design.

CLASS	MAXIMUM CAST DENSITY pcf (kg/m³)	MINIMUM COMPRESSIVE STRENGTH* psi (Mpa)	ULTIMATE BEARING CAPACITY Tons/sf (kN/m²)
I	24 (384)	10 (0.07)	0.7 (69)
II	30 (480)	40 (0.28)	2.9 (276)
III	36 (576)	80 (0.55)	5.8 (552)
IV	42 (672)	120 (0.83)	8.6 (827)
V	50 (800)	160 (1.10)	11.5 (1103)
VI	80 (1280)	300 (2.07)	21.6 (2068)

Comparison of Maximum Fill Material Densities

ELASTIZELL EF			
Class I	24 pcf (384 kg/m³)	Water	62.4 pcf (1000 kg/m³)
Class II	30 pcf (480 kg/m³)	Lightweight Aggregates	60-90 pcf (961-1442 kg/m³)
Class III	36 pcf (576 kg/m³)	Flowable Fills	90+ pcf (1442+ kg/m³)
Class IV	42 pcf (672 kg/m³)	Soils	120 pcf (1922 kg/m³)
Class V	50 pcf (800 kg/m³)	Aggregates, Asphalts	125 pcf (2002 kg/m³)
Class VI	80 pcf (1280 kg/m³)	Lean Concrete	145 pcf (2323 kg/m³)

For specific design values and more detailed specifications, as well as design assistance, please contact the ELASTIZELL CORPORATION OF AMERICA or our local applicator below.

Elastizell Cellular Concrete

ENGINEERED FILL

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