

OVERHEAD to UNDERGROUND

A 3-D GIS UTILITY RELOCATION REPRESENTATION

About Overhead to Underground Utility Relocation

Overhead utilities are relocated underground for beautification purposes, economic development, and damage prevention. Relocating utilities underground creates an attractive streetscape, increases green space, and appeals to new development. Other important benefits of the relocation include securing and protecting the utilities from everyday environmental factors, ensuring service continuity.

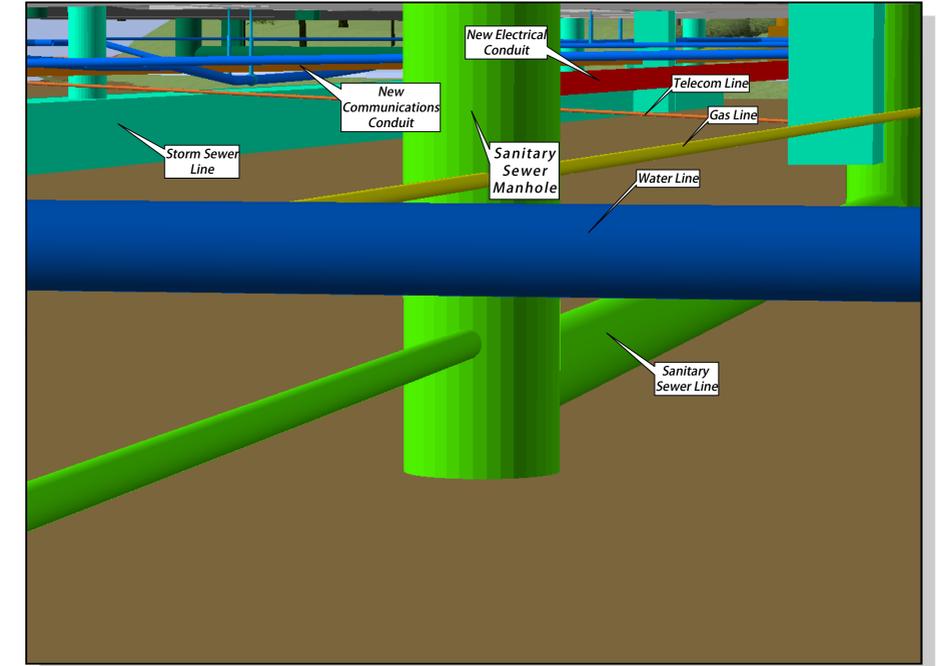
ArcMap and ArcScene were used to model the visualization and illustrate the transition of utilities from overhead to underground.

BEFORE UNDERGROUND UTILITY RELOCATION



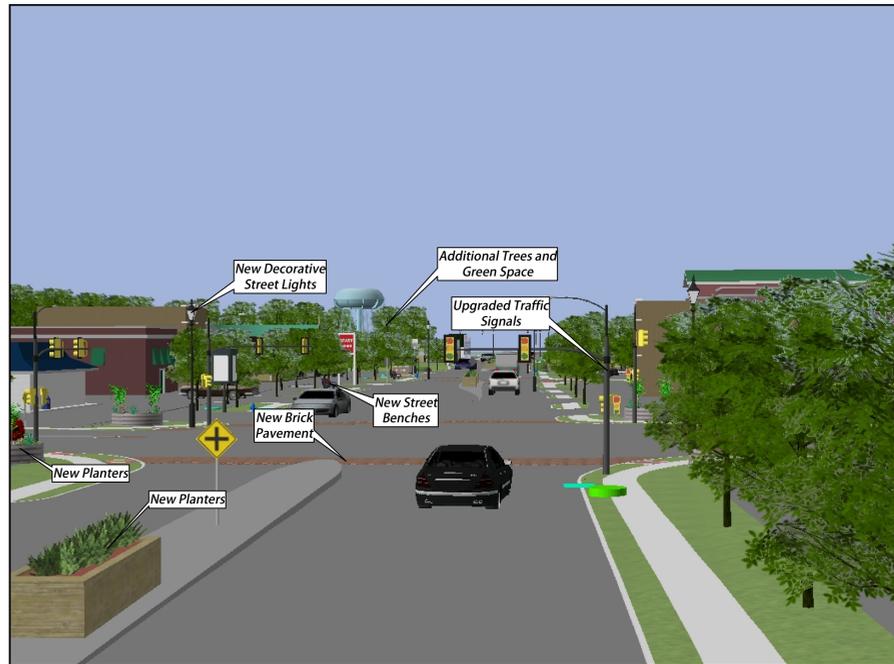
▲ This image displays a cluttered, congested streetscape as a result of a multitude of above-ground utilities (e.g. aerial electric and aerial telephone).

AFTER UNDERGROUND UTILITY RELOCATION - SCENE 1



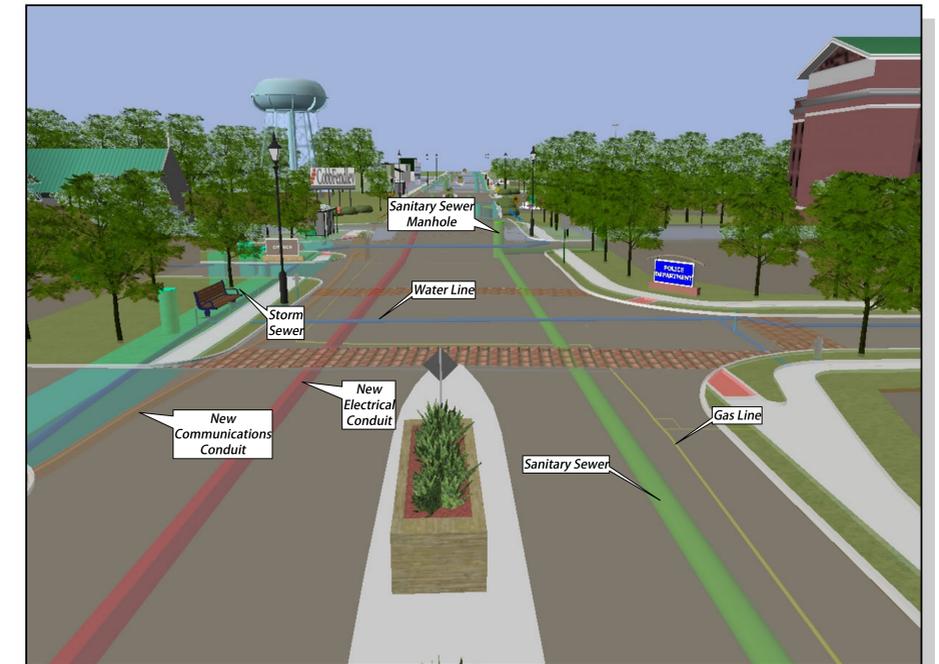
▲ This image displays the complex networks of various utility infrastructures beneath the surface after the utility relocations have been completed.

AFTER UNDERGROUND UTILITY RELOCATION - SCENE 2



▲ This image displays a zoomed-in view of the enhanced streetscape. Most of the utilities were relocated from above ground to below ground, and aesthetic upgrades such as more trees, new pavement, and new light standards were installed to beautify the streetscape and create an attractive and renewed environment.

AFTER UNDERGROUND UTILITY RELOCATION - SCENE 3



▲ This image displays a zoomed-out view of the enhanced streetscape. The various utility infrastructure networks are visible underground. Utilities such as electrical and telecom previously cluttered the streetscape, but are now relocated beneath the surface.

