

# Chelsea City-Wide LiDAR Capture

Chelsea, MA



## Client

City of Chelsea

Meridian Associates has built an innovative relationship starting in 2018 with the City of Chelsea and Dewberry Engineers to provide LiDAR and GIS services to support a city-wide effort to separate the City's sewer and storm water systems and update its GIS database.

Meridian deployed a mobile mapping vehicle along all 44 miles of public roadways in the city to collect billions of laser measurements and tens of thousands of high-resolution images. The comprehensive point cloud database was used to create a seamless Digital Elevation Model (DEM) for modeling and designing the staged replacement of the City's sewer system. Furthermore, the survey grade data can also serve as the base information for design and construction drawings for future infrastructure improvement projects across the City.

The City owns one of the most comprehensive and accurate spatial datasets for any municipality in the region to be utilized for asset management and updating existing conditions plans and GIS.

Starting in 2019, Chelsea began to see dividends, in the form of cost savings and expedited project timelines, from the forward-looking dataset. Meridian was able to immediately leverage the existing LiDAR data to begin extracting features for two separate two and half linear mile existing conditions surveys.