As part of a Phase I Environmental Site Assessment (ESA) for the City of Danville, VA, Cardno conducted an Unmanned Aerial Systems (UAS) survey of an 80-acre industrial site.

**Overview**

High resolution imagery from the flight was processed in-house to produce an aerial orthomosaic of the entire site for review and future planning. The UAS was utilized to take oblique images of structures, perspectives, and suspected recognized environmental conditions (RECs) following the autonomous survey.

The production of a high resolution aerial orthomosaic expanded the possibilities for redevelopment efforts. Tank basins, transformers, and other RECs were identified and surface areas and volumes can be calculated from the survey. Value added information including the condition of buildings, parking lots, property maintenance, extent of foliage, provided useful information to potential developers. Additional, a topographic map of the site was generated with a 0.5-ft contour interval. Overall, the UAS assessment provided a very rapid and cost effective method of data acquisition and assisted in the production of a Phase I Site Assessment. Additionally, the aerial orthomosaic image generated can be utilized for future demolition, remediation, development and design concepts.