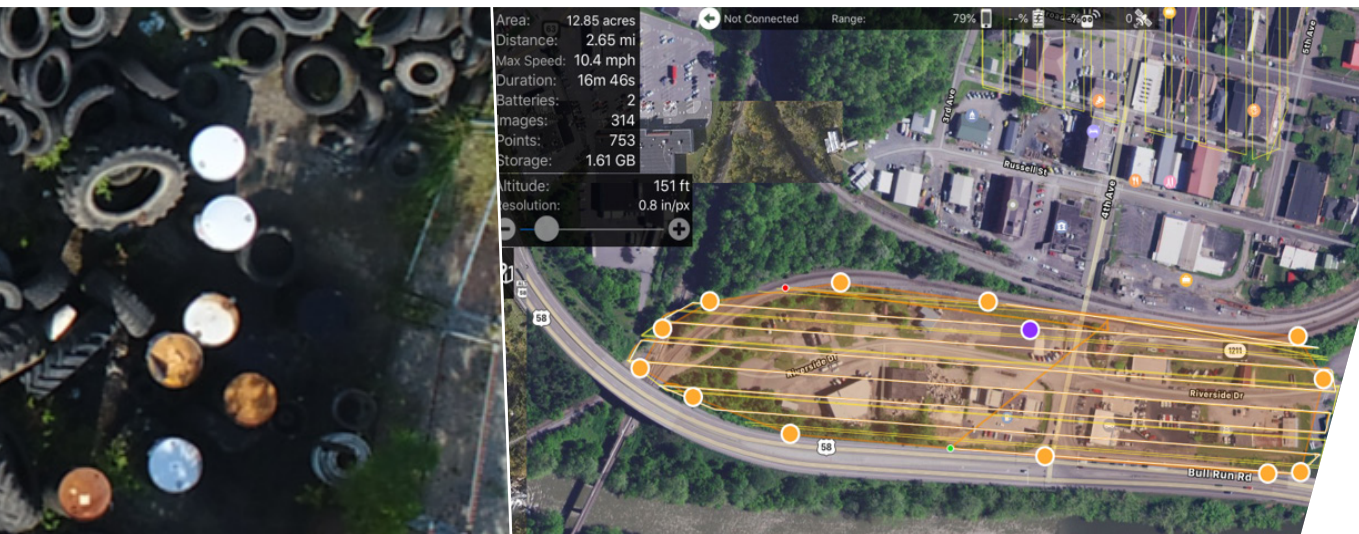


# Saint Paul Corridor Assessment



**Client:**  
Virginia Tech Community Design Assistance Center

**Location:**  
Saint Paul, VA

- Key services:**
- > Environmental Assessment
  - > Watershed Analysis
  - > Topographic Mapping
  - > Volumetric Calculations
  - > Confined Space Inspection

As part of a larger redevelopment effort in Southwestern Virginia, Cardno conducted a corridor assessment along Riverside Drive in Saint Paul, VA.

## Overview

Cardno conducted a corridor assessment of 12.85 acres along Riverside Drive in Saint Paul, VA with a Phantom 4 UAS in class G airspace. To manage risk, the flight was conducted early on a Sunday morning, when limited pedestrian traffic was present. High resolution imagery from the flight was processed in-house to produce an aerial orthomosaic of the entire corridor for review. The UAS was also utilized to take oblique images of suspected recognized environmental conditions (RECs) following the autonomous survey.

During the assessment multiple RECs were detected. Tanks, totes, drums, buckets, tires and the outlines of suspected tank pits and dispenser islands were all clearly visible on the high resolution orthomosaic of the site. The ability to detect these items without having to schedule intrusive property access made the assessment rapid and low cost. Value added information including the condition of buildings, parking lots, property maintenance, and extent of foliage provided useful information to potential developers. Additional data deliverables including topography and watershed analysis could be derived from the UAS survey; however, they were not in the scope of the project. Overall, the UAS assessment provided a very rapid and cost effective method of data acquisition and assisted in the production of a Phase I Environmental Review. The aerial orthomosaic image generated can be utilized for future development concepts and designs.