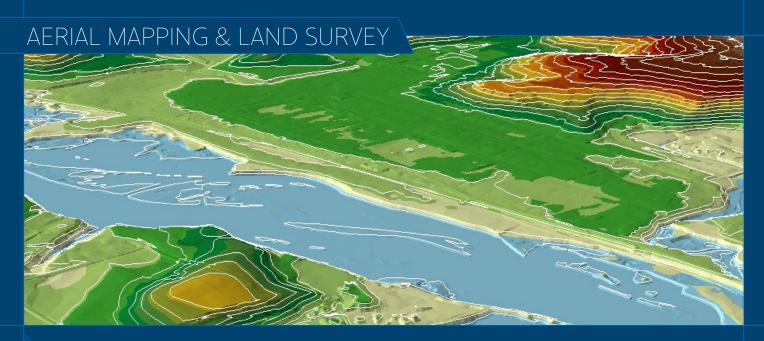




Ingenuity, Integrity, and Intelligence.



## AERIAL MAPPING

- Aerial survey: Current, up-to-date aerial photos, mapping, and design-grade 3D digital elevation models. Used as a base for project and site design.
- Aerial photography: Monitor ongoing development progress and contract compliance by either manned aircraft or unmanned aerial vehicles (UAVs or drones).
- Mobile lidar: Detailed, street-level information (including vertical clearances on bridges) along roadways. Safe alternative to survey personnel in heavy traffic.
- Airborne lidar: Accurate 3D surface models, higher surface definition than county-wide lidar data available to support design and micro-drainage applications.
- Pavement condition analysis (crack detection): Uses a pavement imaging camera and laser illuminator to document roadways to be used for haul routes before and after projects to document pavement conditions.
- Asset inventory: Inventory and rate current municipal assets such as utilities and roadways and to update your system with newly constructed assets.

## LAND SURVEY

- Horizontal and vertical control surveys:
  Provides a unified area-wide base of control points and benchmarks on which to base all project surveys.
- Design surveys: Full topographic surveys of roadways and sites to support design projects.
- **Utility surveys:** Obtain current locations of overhead and underground utilities to support design projects.
- Property surveys: Support property and easement acquisition and land title transfers including legal descriptions.
- High-definition laser scanning: Ground survey lidar to capture 3D point clouds of structures for overhead clearance and detailed information on any type of facility.
- **Stockpile quantities:** Using either HD laser scanning or UAV (drone) technology to obtain current and repeated stockpile quantities for payment.

Licensed land surveyors in Colorado, Florida, Idaho, Illinois, Iowa, Michigan, Minnesota, New Mexico, North Dakota, South Dakota, Texas, Utah, Washington, and Wisconsin.

Ready for the next step? Contact Ayres today. 800.666.3103 | AyresContact@AyresAssociates.com

"The project was delivered on time, within budget, and with very limited demand on City resources."

## **Ross Buetow**

Deputy Public Works Director/City Engineer, Appleton, Wisconsin referring to 3-Inch Orthoimagery project



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