

Precision aerial data. Veteran-owned. Field-proven.

Aerial survey, mapping, and inspection for engineers, contractors, and public agencies. Based in North Texas, serving clients across the South and Midwest.

WingWorX Geospatial is the aerial survey and mapping division of WingWorX Aerospace LLC, a Texas veteran-owned company whose mission is putting veterans to work as FAA Part 107 drone pilots. We combine RTK/PPK flight data with surveyed ground control to deliver accurate, defensible mapping products on schedule, from small sites to large corridors.

CORE SERVICES

Photogrammetry Mapping

Orthomosaics, surface models, and contours with RTK/PPK accuracy.

LiDAR and 3D Modeling

Dense point clouds that see terrain beneath vegetation, for drainage, topo, and corridors.

Thermal Inspection

Radiometric imaging for roofs, solar, and electrical assets.

Construction Progress

Scheduled flights tracking site change over time.

Volumetric Surveys

Stockpile and earthwork volumes with repeatable reporting.

Corridor Mapping

Long linear surveys of roads and utilities with fixed-wing VTOL.

SiteProof™ Documentation

Documents pre-existing conditions to support resolution of damage disputes.

Aerial Inspection

Detailed photo and video of structures, facilities, and property.

COMPANY DATA

UEI

NB1QU53AG999

CAGE Code

24L28

Primary NAICS

541370 Surveying and Mapping

Additional NAICS

423860, 488190, 541512, 541519, 541611

PSC Codes

C211, C214, 7A20, H116

Status

Veteran-Owned Small Business. SBA VetCert pending. SAM.gov active. Texas LLC.

Credentials

FAA Part 107 certified. FAA-registered aircraft. Fully insured.

WHY WINGWORX

Veteran-Led Crews

Mission-first discipline, checklists, and safety culture on every flight.

Rapid Mobilization

Lean, responsive team that schedules, deploys, and starts flying fast.

High-Accuracy Mapping

RTK/PPK aircraft plus GNSS-surveyed control and checkpoints.

Proven Safety Program

Documented SOPs, preflight checklists, and risk assessments every mission.

Airspace Experience

Routine operations in controlled airspace with FAA authorization.

Online Delivery

Secure client portal with interactive maps and 3D models.

EQUIPMENT AND TECHNOLOGY

Aircraft and Sensors

DJI Matrice 4E with RTK
 WingtraRAY VTOL fixed-wing (large area and corridor)
 Wingtra LiDAR: XT32M2X scanner, up to 660 pts/m², 3 cm vertical at 90 m
 DJI Matrice 350 RTK
 DJI Zenmuse L2 LiDAR with RGB, 450 m range
 DJI Zenmuse H20T thermal payload

Ground Control

Emlid Reach RS3 GNSS receiver
 RTK via NTRIP or PPK post-processing
 Surveyed GCPs and independent checkpoints
 State plane and custom coordinate systems
 Starlink field connectivity

Processing and Delivery

DJI Terra photogrammetry and LiDAR
 QGIS and Emlid Studio
 Cloud-hosted orthomosaic tiles
 Web 3D model viewer
 Secure client delivery portal

DELIVERABLES

Product	Formats	Typical Use
Orthomosaic imagery	GeoTIFF, COG, KMZ	Base maps, site planning, GIS layers
Surface and terrain models	DSM, DTM (GeoTIFF)	Grading, drainage, design
Contours and linework	DXF, SHP	CAD and civil design
Point clouds	LAS, LAZ	Modeling, as-builts, analysis
3D mesh models	OBJ, GLB, web viewer	Visualization, stakeholder review
Volumetric reports	PDF, CSV	Inventory, earthwork billing
Thermal and inspection reports	PDF, radiometric JPG	Maintenance and condition assessment
Accuracy and control reports	PDF, CSV	QA documentation and checkpoint results
Photo and video sets	JPG, MP4	Documentation, marketing, dispute support

Turnaround: scaled to project size. Small sites are typically delivered within a week; large-area and corridor projects follow a schedule agreed at kickoff. Deliverables support, and do not replace, work by a licensed professional land surveyor where required.

WHO WE SERVE

- ▶ Civil engineering firms
- ▶ Excavation, sewer, and water contractors
- ▶ Municipalities and public works
- ▶ Federal and state agencies
- ▶ Commercial property managers
- ▶ General contractors and developers
- ▶ Aggregate, quarry, and material yards
- ▶ Environmental consultants
- ▶ Airports and facility owners
- ▶ Utilities and energy

PAST PERFORMANCE

Quality Sand & Gravel. Volumetric stockpile survey and report.

Veterans Outpost. RTK facility mapping and documentation.

Majors Field (GVT), Greenville TX. Recurring survey work in Class D airspace and veteran pilot training.

9 Line Aerial Media. Subcontract mapping in Illinois.

