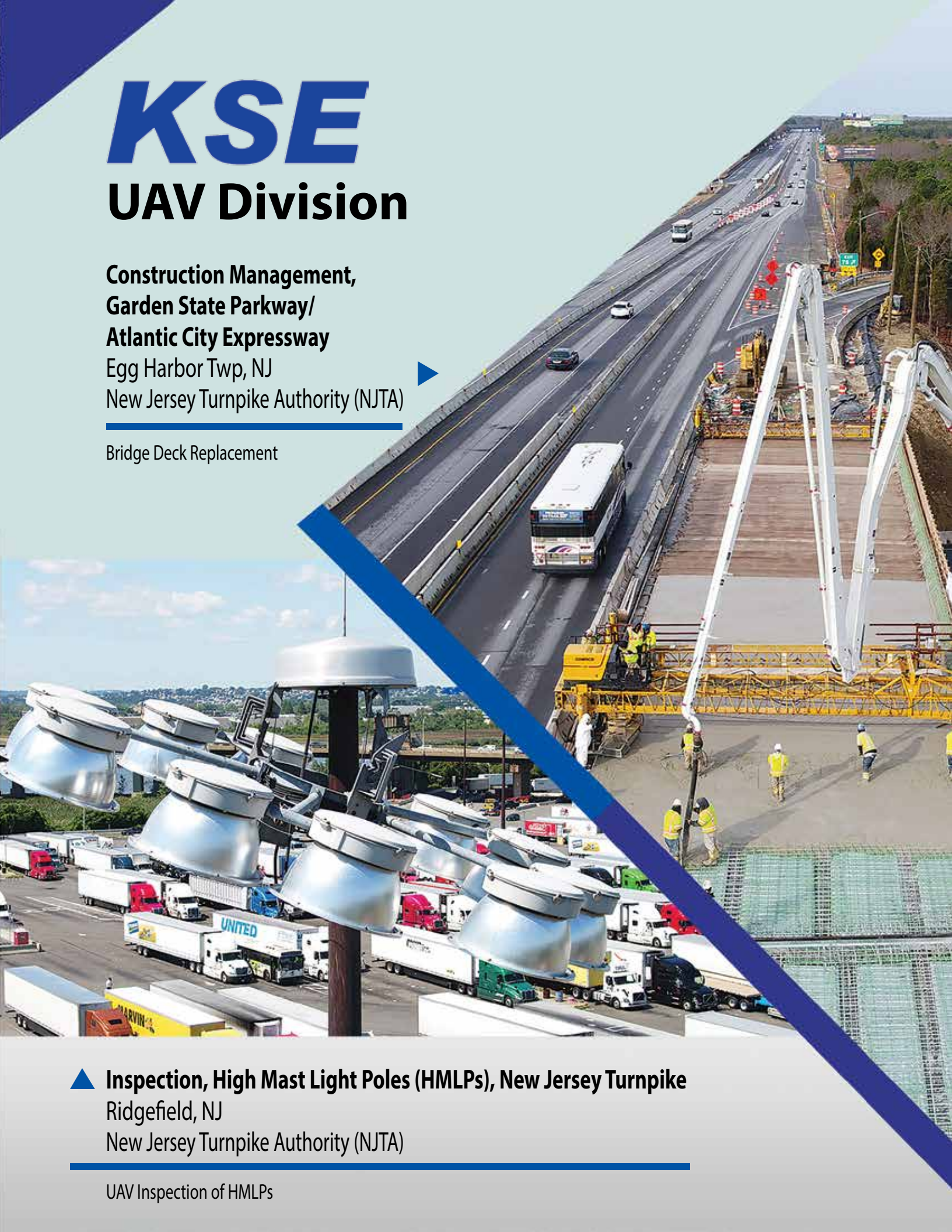


# KSE

## UAV Division

**Construction Management,  
Garden State Parkway/  
Atlantic City Expressway**  
Egg Harbor Twp, NJ  
New Jersey Turnpike Authority (NJTA)

Bridge Deck Replacement



▲ **Inspection, High Mast Light Poles (HMLPs), New Jersey Turnpike**  
Ridgefield, NJ  
New Jersey Turnpike Authority (NJTA)

UAV Inspection of HMLPs

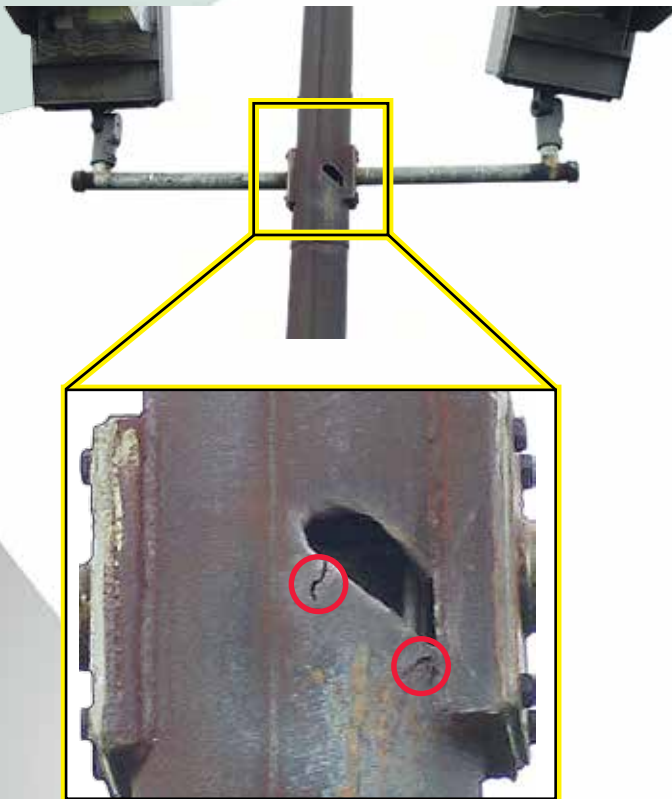


### ◀ DJI Inspire 2 UAV

- Obstacle Avoidance Sensors
- 22 MPH Wind Speed Resistance
- FAA Registered and Insured

### Controller and X5S Camera ▶

- Master-Slave Controllers
- 4-Mile Range
- 4k 60FPS Video
- 20.8 MP Photos



### ▲ 80 FT High Mast Light Pole

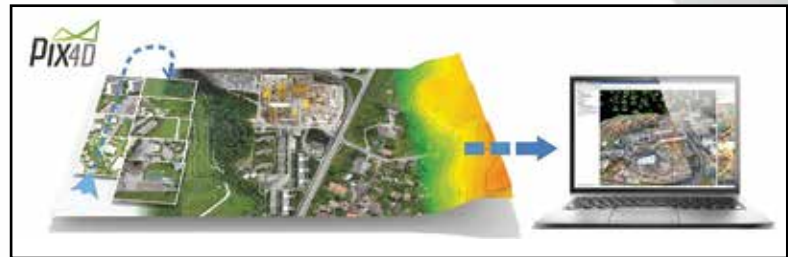
- Photo Taken from 10 Feet
- Detection of Small Cracks in Dark Weathering Steel



### ▲ Hudson-Bergen Light Rail Pedestrian Bridge

- Underside and Bearings
- 50 Feet Above Light Rail

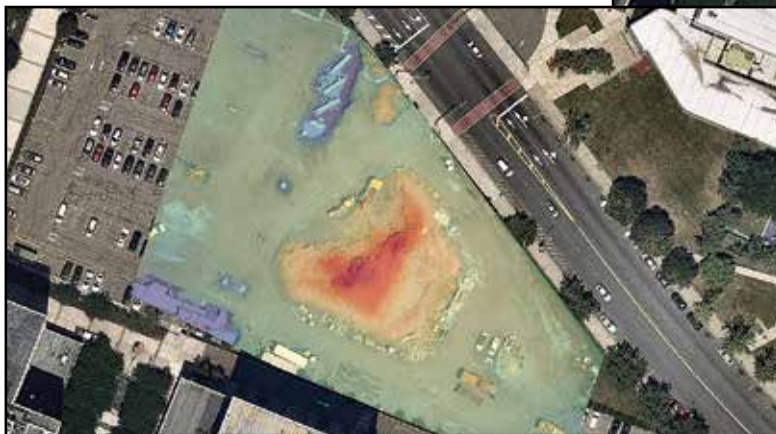
**KS Engineers, P.C. (KSE)** is an award-winning, leading provider of engineering, independent construction inspection, and construction quality assurance services. Unmanned Aerial Vehicles (UAVs) or drones have been rapidly advancing in the engineering sector. For inspection purposes, KSE opts for a dual controller configuration with the pilot in command focuses on flight and a licensed inspector controls the camera. For construction management and survey, KSE uses Pix4DMapper photogrammetry software. Pictured below is an orthoimage captured for Essex County Parking Garage construction. From the drone imagery, a digital surface model was created for accurate measurements and volumes. Our clients recognize the cost saving advantages, increased safety, and quick turnaround from using UAVs.



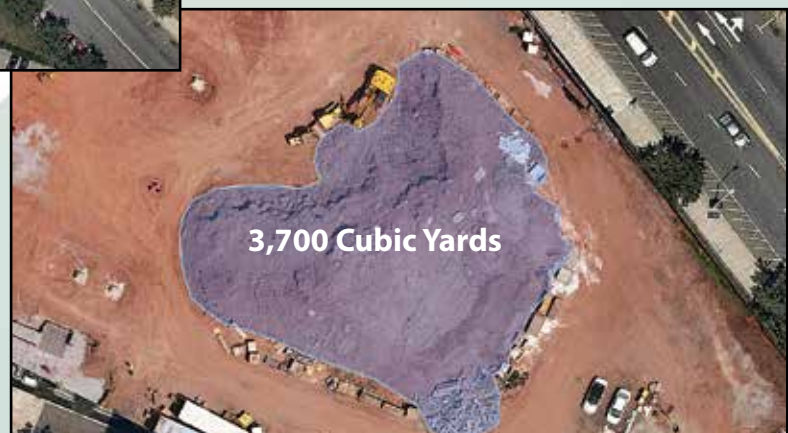
**Orthoimage of Essex County Parking Garage Construction**



**Digital Surface Model Created with Pix4DMapper**



**Accurate Calculation of Soil Stockpile Volume**





▲ **Inspection, William H. Brown Academy**  
Collapsed Roof from Fire  
Newark, NJ

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- ◀ **Unsafe Access**
- Asbestos Present
  - Structurally Unsafe on Foot
- 

- ▼ **Roof Inspection**
- Deteriorated Roof
  - Structurally Unsafe on Foot
- 



**KSE**  
**KS Engineers, P.C.**

Engineers • Surveyors  
Construction Managers

**Corporate  
Headquarters**

494 Broad St., 4th Fl.,  
Newark, NJ 07102  
Tel: 973.623.2999  
Fax: 973.242.2955  
info@kseng.com • www.kseng.com

New Jersey • New York • Pennsylvania • Connecticut