KMA CONSULTING ENGINEERS

Company Information

KMA Consulting Engineers, Inc. (KMA) provides engineering, land surveying, and photogrammetric mapping services to State Agencies, Counties and private sectors.
KMA has grown steadily to provide quality services for its clients.
We are located in Medford, Burlington County, New Jersey to serve
New Jersey, Pennsylvania, Delaware, and New York.
KMA is a certified **DBE, SBE, WBE** and **ESBE** company**.**
KMA has been providing comprehensive range of the followings services:

- Geotechnical and Foundation Design
- Underwater Inspection, Bridges Inspection, Dams Inspection
- Pipes Inspection using 3D Laser Image and CCTV
- Highway Design, Bridge Design, Spillway and Dam Design
- Water Resources Management including Drainage Design
  Flood Control Design, Hydrology and Hydraulic Study
- Subsurface Utility Engineering (SUE)
- Storm Water Management Study and Design
- Stream Restoration and Bioengineering Study and Design
- Aerial photography
- Digital Ortho-photography
- LIDAR and LAMP mapping
- Mapping, Surveying and Right-of–Way Engineering
- Construction Management and Field Inspection

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Services

We provide the following comprehensive range of services:

- Geotechnical and Foundation Design
- Underwater Inspection, Bridge Inspection and Dam Inspection
- Highway Design and Bridge Design
- Dam study and design
- Drainage/ Flood Control/ Hydrology and Hydraulic Study and Design
- Subsurface Utility Engineering (SUE)
- Storm Water Management Study and Design
- Stream Restoration and Bioengineering Study and Design
- Aerial Photography
- Digital Ortho-photography
- Mapping, Surveying and Right-of-Way (ROW)
- Planning and GIS analysis
- Engineering Construction Management and Field Inspection

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Geotechnical Engineering

Our geotechnical engineering group is extensively experienced in comprehensive geotechnical engineering services.

KMA provides services in the following areas:

- Performing test pits and lab testing for storm water management
- Concrete and pavement testing
- Develop soil boring program
- Develop bid package for drilling contractors
- Provide soil boring certified inspectors
- Subsurface Exploration
- Foundation Analysis and Design
- Pavement Design
- Slope Stabilization and Seepage Analysis
- Stream Restoration using Bioengineering Design
- Soil Investigation, Scour Evaluations and Protection
- Erosion Control
- Static and Dynamic Pile Load Tests

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Subsurface Utility Engineering

Subsurface Utility Engineering is a process for accurately identifying the quality of subsurface utility information needed for project planning and design, and for acquiring and managing that level of information during the development of a project.

Underground utilities of interest include the following:

Communication Cables; Gas, Petroleum and Propane Lines; Sanitary and Storm Sewers; Electric Power Lines; and Water Lines, etc.

Traditionally, information concerning location of underground utilities during project planning stage is obtained from sources such as:

Old project plans and utility records (As-Designed or As-Built). The reliability of the information is sometimes questionable and the accuracy cannot be verified. This can be attributed to a number of factors including the fact that there is no centralized record storage, no standard recording format and, most importantly, no one is responsible for the accuracy of the information even if it is available.

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Storm Water Management

KMA Project Manager, Team Leaders and other support staff have attended technical training for the NJDEP Storm Water Management Rules and BMP Manual and are familiar with the Rules. Projects that require NJDEP - LURP permits such as Freshwater Wetlands, Coastal Zone Management, Flood Hazard Area Act, Waterfront Development, and other NJDEP Permits must comply with the Storm Water Management Rules.

KMA Team provides the followings services:

- Determine the location of Stormwater Management Facilities (SWM)
- Determine Riparian Buffers zones requirement
- Determine the number and location of soil test pits
- Call for utility markup
- Provide traffic control
- Perform test pits using Backhoe
- Prepare soil logs and describe the soil characteristics
- Perform permeability soil testing in the Lab
- Perform perculation tests in the field if required
- Design SWM facilities for water quality and quantity which include: Design
- Bio-retention systems, detention basin, retention basin, extended detention
- basin and infiltration basin
- Perform computation for loss of groundwater recharge
- Determine all required hydrology and hydraulic

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Photogrammetry

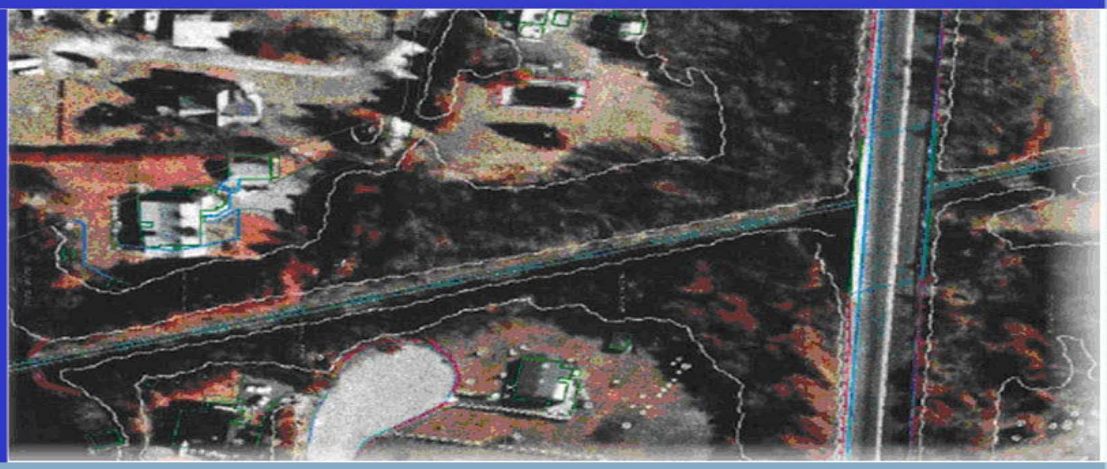
KMA maintain professional and senior technical staff including certified photogrammetrists with experience range from 20 to 38 years.
Their experience ranges from providing quality base mapping for feasibility studies and final designs in the transportation and land development industry.
KMA provides the following services by using the State-of-Art equipment:

- Aerial Photography
- Low-Altitude Mapping Photography (LAMP)
- LIDAR Mapping
- Supplementary Control by Aerial Triangulation
- Digital Photogrammetric mapping
- Scanning Services
- CADD Production in Micro Station V8/ Inroad and Auto CAD
- Develop Digital Elevation Model (DEM)
- Develop Surface and Digital Terrain Model (DTM)
- Digital Ortho-photo Compilation
- Topographic Mapping
- GIS Base mapping
- Highway and Rail Mapping

KMA is committed to producing high quality aerial photography, and mapping products at competitive prices to meet our clients need and schedule.

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS



Surveying

KMA is a growing surveying firm providing service to State Agencies, Counties, and Private Clients. KMA has the ability to deliver complete and comprehensive service on schedule from survey control reports to final base mapping.

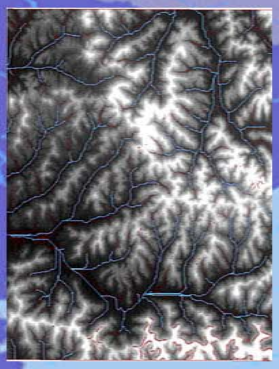
KMA maintains four surveying crews with two Licensed Surveyors who perform:

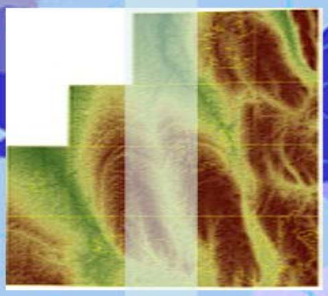
- Ground Control for surveying and mapping using Global Positioning System (GPS)
- Stream Cross-sections and Lake Cross-sections
- Topographic Surveys of Roadways, including Cross-sections, Profiles, delineated wetlands, drainage systems, sewer systems and utility lines.
- Construction Layout
- Preparing As-Built plans
- Field Edit of Mapping
- Boundary and Title Surveys- Deed and Title Search
- Right-of-Way Engineering

KMA utilizes MicroStation V8 and Inroads CADD platform that is compatible with the NJDOT CADD system. All of our work for the NJDOT is performed in accordance with Article 51 (“CADD”) of the NJDOT . Standard agreement and the preparation of survey report will comply with the Article 44 requirements.

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS





Planning/GIS Management

Within the larger planning profession, KMA planners work in many particular fields such as land use and transportation planning. KMA Planning staff helps anticipating future occurrences and problems through exploring their probable impact, and through developing policies, goals, objectives, and strategies to solve problems. They seek to protect and preserve the physical environment as well as to develop the social aspects of both small and large communities. Adjoining planning, GIS is used to analyze spatial information, store data and create maps though many techniques such as Geodatabase, Geocoding, Georeferencing, and so on.

We provide the following services:

- Comprehensive/Master Planning
- Transportation Planning and Corridor Studies
- Transit-oriented Development
- Waterfront Master Planning
- Geographic Information Systems (GIS)
- GIS with Remote Sensing
- GIS for Watershed Management
- GIS for Storm Water Management

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Construction/Inspection Management

KMA inspectors have experience in construction inspection, administration and management services for construction of highways and bridges for NJDOT, NJTPA, Penn DOT and Pennsylvania Turn-Pike.

KMA construction inspectors meet the highest industry standards and maintain up-to-date certifications with National Institute for Certification in Engineering Technologies (NICET Levels I, II, III and IV), additional certifications include:

- **American Concrete Institute** (ACI field technicians, Lab technician and inspectors)
- **NJ Society of Asphalt Technologies**
- **Work Zone Traffic Control Coordinators** (TCC).

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Projects completed by KMA which include Mapping and Surveying

The following some of Mapping and surveying projects that KMA have completed for NJDOT:

- Route 168 and NJTA interchange 3 Drainage Improvement Final Design, Bellmawr, Camden County
- Route 56 @ Rainbow Lake Dam- Pittsgrove Township
- Route 322 Mullica Hill Dam-Gloucester County
- Route 30 Egg Harbor City-Atlantic County
- Route 130 @ Brook lawn Circle Final Design- Camden County
- I-295 @ Exit 2 Drainage Improvements- Carneys Point, Salem County
- Rehabilitation of I-295 Berlin/Haddonfield Road & Route 130- Gloucester & Camden Counties 8 miles for Final Design
- Route 30 / Cooper River Drainage Improvement Final Design-Camden County
- Route 30 MP 26 Winslow Township, Camden County, Drainage Improvements
- Route 30 MP 45 Egg Harbor Township, Atlantic County, Drainage Improvements
- Bayonne Global Terminal- City of Bayonne, Hudson County
- Reconstruction of Egg Harbor Road (CR 630); Washington Township; Gloucester County
- Cramer Hill Redevelopment-City of Camden, Camden County
- Route 35 Drainage Improvement Study- Point Pleasant, Ocean County, NJ
- Route 36 MP 15.4 to 16.2 Drainage Improvements, Long Branch, and Middlesex County, NJ
- Route 27 Signal Improvement Project, Highland Park, and Middlesex County, NJ
- Scour Bridge Evaluation for 8 On-System and 7-Off System Bridges for Warren and Essex Counties (NJDOT). KMA performed the scour analysis and the Hydrology and Hydraulic calculations.

Knowledge, Managment and Assurance

KMA CONSULTING ENGINEERS

Projects completed by KMA which include Mapping and Surveying

- Route 56 at Rainbow Lake Dam, Pittsgrove Township, Salem County, NJ
- Route 322 Mullica Hill Dam, Harrison Township, Gloucester County, NJ
- Route 30, Egg Harbor City, Atlantic County, NJ
- Route 47 Drainage Improvements, Cape May Co,
- Route 44 Drainage Improvements, Deptford Township, Gloucester County, NJ
- Route 45 Drainage Improvements, Salem Co, NJ
- Route 130/Brooklawn Circle, Final Design, Camden County, NJ
- I-295 at Exit 2 Drainage Improvements, Carneys Point, Salem County, NJ
- Route 287 Glaser Pond, NJ
- I-295 from Route 45 to Haddonfield 8 mile section for final design
- Rte 12 Main Street Final Design
- Route 27 Traffic Signal Improvement
- Rte 139, Tonelle Circle
- Armed Forces Reserve Center, NY
- Baderfield Airport, Atlantic City, NJ
- Central Gateway, Camden, NJ
- Capital Health Merrill Lynch
- Lucent Technology, NJ
- Route 56 at Rainbow Lake Dam, Pittsgrove Township, Salem County, NJ
- Route 322 Mullica Hill Dam, Harrison Township, Gloucester County, NJ
- Route 30, Egg Harbor City, Atlantic County, NJ
- Route 47 Drainage Improvements, Cape May Co,
- Route 44 Drainage Improvements, Deptford Township, Gloucester County, NJ
- Route 45 Drainage Improvements, Salem Co, NJ
- Route 130/Brooklawn Circle, Final Design, Camden County, NJ
- I-295 at Exit 2 Drainage Improvements, Carneys Point, Salem County, NJ
- Route 287 Glaser Pond, NJ
- I-295 from Route 45 to Haddonfield 8 mile section for final design
- Rte 12 Main Street Final Design
- Route 27 Traffic Signal Improvement
- Rte 139, Tonelle Circle
- Armed Forces Reserve Center, NY
- Baderfield Airport, Atlantic City, NJ
- Central Gateway, Camden, NJ
- Capital Health Merrill Lynch
- Lucent Technology, NJ

KMA CONSULTING ENGINEERS

Geotechnical Design projects completed by KMA

The following some of Geotechnical Design projects that KMA have completed for NJDOT:

- Route 168 Newton Lake Dam
- Route 130 Crystal Lake Dam-Bordentown Twp; Burlington County, NJ
- Route 30 Blue Anchor Lake Dam-Winslow Twp; Camden County, NJ
- Oakwood and Birchwood Lake Dam – Medford Lakes, Burlington County
- Route 48 Layton Lake Dam
- Route 322 Mullica Hill Pond Dam Final Design
- Route 287 Glaser Pond
- Route 30 Cooper River Flood Gate Camden County
- Route 35 MP 0-4 Stormwater Outfalls Ocean County
- Route 168 contract A and contract B Bellmawr, Camden County
- Atlantic City Expressway Widening, 23 miles. KMA performed Soil investigation and Stormwater Management design as per Pinelands Commission and NJDEP requirements.

Knowledge, Managment and Assurance