



PROFESSIONAL CAPABILITIES

From laser-based automated hydrographic survey systems to recording fathometers to basic sounding pole or lead line surveys, Collins' team of engineering and hydrographic professionals can provide a cost-effective, one-stop solution to hydrographic projects.

PROJECT SPECIFIC SERVICES

- Automated Hydrographic Survey
- Complete Bathymetric Survey
- Pre-Dredging and Post-Dredging Survey
- Beach and Riverbank Profiling
- Bridge and Wharf Scour Survey
- Underwater Obstructions or Structure Survey

SUPPLEMENTAL DATA COLLECTION

- Subbottom Profiling and Side Scan Sonar
- Underwater Imaging
- Current Measurement
- Topographic (Land)
- Specialized Studies

TYPICAL FACILITIES

- Bridges, Reservoirs, and Navigation Channels
- Coastal Structures and Waterfront Facilities
- Dams and Intake/Outfall Structures
- Rivers and Harbors

EQUIPMENT AVAILABLE

- GPS Receivers
- Laser Range-Azimuth Positioning
- Survey Echo Sounders
- Survey Vessels
- Data Acquisition Software

PLOTTING, PRESENTATION & PROCESSING

- Automated CAD Data Integration
- Profile, Contour, and 3-D Plots
- Digital Terrain Modeling
- Volume Computations

ENGINEERING SUPPORT

- Project Planning
- Site Development
- Scour Evaluation and Hydraulic Analysis
- Dredging Engineering
- Permit Preparation

COLLINS ENGINEERS^{INC}