

**SCOPE OF SERVICES**  
**MISCELLANEOUS DISTRICTWIDE SURVEYING AND MAPPING**  
**FM # 44804343201**

**A. OBJECTIVE:**

**Major Work Types: 8.1; 8.2; 8.4**

The Department desires to obtain assistance from the consultant, hereinafter referred to as the Surveyor & Mapper, for the performance of miscellaneous Surveying and Mapping Services. These services include but are not limited to, Field Surveys, Historical Baseline and Existing Right of Way Determination, Global Positioning System (GPS) Surveys, Monumentation Surveys, Bathymetric Surveys (which includes single beam, multi beam and side scanner sonar capabilities), Utility Designation and Excavation (including Underwater Utilities), Tree Surveys (trees identified by an Arborist or Landscape Architect), Right of Way Control Survey Maps, Right of Way Maps, Maintenance Maps, Right of Way Monumentation Maps, Boundary Surveys, Quality Assurance Reviews, Expert Witness Testimony, Title Search Plotting Maps, Title Document Review and Analysis, Sketches, Parcel Staking, Legal Descriptions and Documents of Conveyance.

**8.1: Control Surveying:** This type of work provides horizontal and vertical control to a specified standard for Department projects.

**8.2: Design, Right of Way, and Construction Surveying:** This type of work includes boundary surveys, right of way surveys, as-built surveys, construction layout surveys, topographic surveys, hydrographic surveys, quantity surveys, record surveys, mean high water line surveys, and special purpose surveys.

**8.4: Right of Way Mapping:** This type of work includes the production of right of way related maps, as well as the preparation of legal descriptions and sketches of legal descriptions based on information supported by the applicable surveys or maps defined in the preceding types of work, title searches, and other documents.

**Minor Work Type: 8.3**

District-wide Aerial Surveys, Mobile Lidar, Aerial Lidar, and Photogrammetry services are required by the Department of Transportation for projects to be individually assigned in District IV. The Consultant will be responsible for all work necessary to control, take and process precision quality aerial photography that will produce quality, rectified photographic imagery at various scales. The Consultant will also be responsible for all photogrammetric work necessary to interpret measure, digitize and compile, by stereoscopic techniques, the mapping and survey data from the aerial photography, as required by the individually assigned project.

**8.3: Photogrammetric Mapping:** This type of work includes surveys and the preparation of maps using photogrammetric methods.

The use of any Unmanned Aircraft System (UAS) to accomplish contract activities must comply with FDOT UAS Operations Policy No. 00-020-001-a. If measurements or mapping are to be performed from the collected imagery, this activity is considered Surveying and Mapping under F.S. 472 and requires prequalification in Work Type 8.3.

The District Surveyor must approve any drone activity for surveying and mapping in writing.

#### B. THE SURVEYOR & MAPPER'S RESPONSIBILITIES:

Total Station Equipment used on the surveys shall be compatible with FDOT Electronic Field Book processing standards. Field Data shall be delivered electronically for input into FDOT Electronic Field Book software. The Surveyor & Mapper must have the ability to establish state plane coordinates with survey grade GPS equipment, including Real Time Kinematic (RTK) capabilities.

The Surveyor & Mapper shall also provide for traffic control (Flagging & Barricades) during their surveys or identify a sub-consultant to provide for traffic control.

The Surveyor shall comply at all times with applicable Federal, State, and local laws, provisions and policies governing safety and health. This includes Title 29, Code of Federal Regulations, Parts 1910, Occupational Safety and Health Regulations, including confined space entry requirements for General Industry and Construction including any subsequent revisions and updates. In order to safely conduct the public through the work area, full compliance with the current Department Roadway and Traffic Design Standards (600 Series), Survey Safety Handbook, and current Maintenance of Traffic Training FDOT Topic No. 625-010-010-a is a minimum requirement.

All work shall be accomplished in accordance with the criteria established by:

- The Department's Highway Field Specifications
- FDOT Survey Handbook (Survey Procedure Topic No. 550-030-101a)
- District IV Survey Guidelines
- Florida Statue 472.027
- FDOT Utility Accommodation Manual, ASCE Standard, Topic #710-020-001
- District 4 Right of Way Mapping Guidelines
- FDOT Right of Way Mapping Procedure, Topic Number 550-030-015-c
- Right of Way Mapping Handbook
- Right of Way Mapping CADD Handbook
- CADD Production Criteria Handbook
- Minimum Technical Standards for Land Surveyors, Chapter 5J-17.050-052, F.A.C.
- Any special instructions provided by the District Surveyor.

All work shall be coordinated with the District Surveyor and will be subject to review.

The Surveyor & Mapper (Prime Consultant) is required to have two (2) survey parties ready to work within 24 hours and a third survey party ready within 48 hours of notice to proceed along with enough office staff to support this contract.

The Surveyor & Mapper shall have at least one crew available that is CSX R/R certified. This certification must be maintained through the life of the contract.

The Surveyor & Mapper shall also have at least one crew available that is confined space certified with any equipment necessary or be able to rent the equipment to enter confined spaces. This certification must be maintained through the life of the contract.

Establish and implement a QA/QC plan. Also includes sub-consultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc. The QA/QC plan must be submitted to the District Surveyor for his review at the time of the notice to proceed (NTP) of the contract.

It shall be the responsibility of the Surveyor & Mapper to utilize the very best professional judgment, practices, and principles possible during the performance of the work commissioned under this contract. The Surveyor & Mapper shall be aware that as the project is developed, certain modifications and/or improvements to the original Task Work Order may be required. The Surveyor & Mapper and the DEPARTMENT will determine if any of these modifications warrant any supplemental fee request(s). The Surveyor & Mapper shall demonstrate good project management practices while working on this project. These include communication with the DEPARTMENT and others as necessary i.e., management of time, funds, resources, and documentation. The CONSULTANT shall set up and maintain throughout the duration of the contract a project log, correspondence file, and database of surveying and mapping files for each Task Work Order.