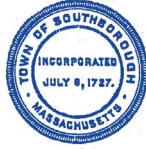


# TOWN OF SOUTHBOROUGH



## CONSERVATION COMMISSION

TOWN HOUSE · 17 COMMON STREET · SOUTHBOROUGH, MASSACHUSETTS 01772-1662  
(508) 281-8984 · FAX (508) 480-0161 · [mdanza@southboroughma.com](mailto:mdanza@southboroughma.com)

### **Impervious Surface Planimetric Data Planimetric Impervious Mapping Project – FY22 Request for Qualifications**

The Town of Southborough is seeking the services of a qualified GIS or planning firm to generate a detailed vector layer of impervious surface in the Town of Southborough. The specific boundaries of mapping shall be the boundaries of the Town of Southborough available through the MassGIS Community Boundaries from Survey Points layer (<https://docs.digital.mass.gov/dataset/massgis-data-community-boundaries-towns-survey-points>), plus a 100-foot buffer beyond.

#### **Requirements**

Interested firms should submit a letter of interest (6 pages maximum) that includes:

1. A summary of the firm's experience with planimetric data development;
2. The name and qualifications of the staff person(s) primarily responsible for planimetric data production and review;
3. Identification of all GIS and orthographic data sources utilized in the creation of final planimetric deliverables;
4. Commitment to meet the schedule outlined below;
5. Restatement of the requested Scope of Services, with any additions or deletions highlighted;
6. Lump sum fee to complete the services;
7. Hourly rates for any additional services that may be requested by the Town;

8. Commitment to utilize the 15-cm resolution, 16-bit, 4-band digital USGS orthoimagery provided by MassGIS (available <https://docs.digital.mass.gov/dataset/massgis-data-usgs-color-ortho-imagery-2019>) in planimetric data production;
9. A narrative description of how enumerated items in the Scope of Services will be met, and;
10. A narrative description of how planimetric data is validated.

### **Scope of Services – Planimetric Data Development**

1. Attend a kick-off meeting with municipal and state officials in Southborough, MA (in person or virtual – to be determined)
2. Produce planimetric impervious vector layer with 11 layers, enumerated below:
  - a. Building roofs
  - b. Paved roads
  - c. Paved driveways
  - d. Paved sidewalks
  - e. Paved parking lots
  - f. Paved pads and patios
  - g. Permanent pools
  - h. Recreational areas
  - i. Trails
  - j. Large tanks
  - k. Airports
3. Capture surface type in attribute table of resultant vector layer
  - a. Town should have the ability to determine the amount of impervious per parcel
4. Produce a pilot sample of planimetric data for municipal review prior to final planimetric data delivery
5. All deliverables shall be made in Esri File Geodatabase format, compatible and operational with ArcGIS 10.6 and 10.9 (we will be updating to 10.9 in the near future).
6. Spatial accuracy of the final deliverable dataset shall be equal to or better than 30 cm (2 pixels) RMSE. The source orthoimagery was field-tested using 132 surveyed checkpoints. Horizontal accuracy tested 10 cm RMSE<sub>x</sub>, RMSE<sub>y</sub> and RMSE<sub>r</sub>. Allowance will be made for radial displacement of any tall structures.
7. Final dataset must be fully GIS compliant with correct geometric relationship between digitized points, lines, and polygons. There shall be no edge matching or errors in topology. The selected firm is expected to work cooperatively with Town personnel and process any needed correction identified during the Town's internal quality control process.

## **Project Timeline**

1. RFQ released by the Town – September 15, 2021
2. Responses due from interested firms – September 24, 2021
3. Interviews and/or phone calls by request (if necessary) – September 28, 2021
4. Firm selected – September 29, 2021
5. Kick-off meeting with Town & firm – October 4, 2021
6. Pilot data available for review – December 17, 2021 (or as agreed upon)
7. Full planimetric dataset complete and available for review – January 21, 2022 (or as agreed upon)
8. The selected firm will be required to enter into a contract with the Town to perform the services described above.
9. Selection of the firm that provides the greatest benefit to the Town will be made by the Conservation Agent & MVP Core Team after consideration of both cost and non-cost information submitted by each interested firm.
10. Responses shall be sent electronically to [mdanza@southboroughma.com](mailto:mdanza@southboroughma.com) no later than 12pm on Friday, September 24, 2021

## **Additional Information**

1. Chosen vendor will need to provide adequate information for billing as required by the Southborough Accounting Department (ex: W-9)
2. The project is being partially funded by an MVP Action Grant