054-19 Appendix A - Technical Specifications

Sanitary Sewer Manhole Inspection

Scope:

Work covered includes furnishing all labor, materials, equipment and services required to perform manhole inspections that fully conform to National Association of Sewer Service Companies (NASSCO) Manhole Assessment and Certification Program (MACP) Level 2 Inspections with 3D scan and imagery for approximately 70,000 sewer manholes within the JEA service territory. The objective of the manhole inspection is to determine which structures have reached the end of their useful service life and require replacement.

Specifications:

- 1. Vendor will be required to find, identify and inspect manholes provided by JEA GIS/ArcMap applications or maps. This may require walking through wooded areas, wetland areas, fenced backyards or sloped terrain with the equipment needed to access and inspect the manholes.
 - a. Manhole scanner shall be 40 lbs. or less to ease in portability through said terrain/easements
- 2. Vendor will be responsible for all equipment and tools necessary to safely access and inspect the manholes.
- All employees performing the data coding of manhole defects and/or quality assurance/quality control of
 the scanned manhole data shall have knowledge, experience, training and current NASSCO MACP
 certification.
- 4. Level 2 inspections, with 3D scan and imagery, gather detailed information to thoroughly document all defects, determine condition of manhole and provide the specific information needed to recommend corrective action
 - a. Manhole scanner shall be a fully automated system capable of lowering and retrieving automatically in order to maintain continuity throughout the imaging process.
 - b. Manhole scanner and supporting application/software shall be able to produce scans immediately for review to ensure clarity and exposure of imagery
 - c. Manhole scanner shall be able to lower approximately thirty feet deep.
- 5. All inspection data shall be entered, by the vendor, into a NASSCO MACP compliant application/database of the newest version.
 - a. Inspection reports shall include the 3D scan, video, digital stills of defects, condition and assessment report documents, etc.
 - b. Inspection data shall be Wincan sewer inspection and asset management software or compatible with Wincan
 - c. Inspection data shall include manhole attributes such as asset and object ID, date of inspection, GPS coordinates (sub-meter accuracy; horizontal =/- 3 feet), depth, material, liner material, etc.
- 6. Vendor will provide a weekly list, to JEA Sewer O&M/Sewer PM managers and/or designated contact persons, detailing any manhole or sewer main line that requires cleaning, pumping down, bypassing or other form of flow control, in order for proper inspection purposes.
- 7. Vendor will provide and supply a plan for the maintenance of traffic, for any manhole requiring traffic control, in order to properly inspect and provide all MOT as required.
- 8. Vendor will be responsible to acquire all permits from FDOT, Duval, St. Johns, Clay and Nassau Counties that are necessary to complete said requirements of this contract.
- 9. Vendor shall submit a comprehensive list of equipment and technology to JEA prior to the commencement of work. Equipment list shall include but not limited to:
 - a. Safety equipment
 - b. Inspection equipment
 - c. Traffic control/MOT equipment
- 10. Vendor will make every effort to locate all manholes. Metal detectors and shovel excavation may be necessary. Weekly notification with list of structures that could not be inspected due to being buried, unable to mitigate surcharge, could not open or unable to locate shall be provided to D&C.
- 11. Vendor will notify D&C immediately upon finding the following:
 - a. Sanitary Sewer Overflow
 - b. Blockages that may cause customers to back up or SSO

- c. Imminent or catastrophic failure of structure
- d. Evidence of cave-in on pipe or manhole
- e. Any other defect that may affect system integrity or impact customers directly
- 12. Prior to the start of work, the vendor will coordinate with JEA's Project Outreach team, via ProjectOutreach@jea.com, to provide forward communication to JEA customers detailing the following: location, scope, tentative schedule, estimated completion, traffic concerns, etc. and place JEA approved door hangars in the neighborhoods where the work will be performed, as well as being responsive to JEA Project Outreach or COJ inquiries.
 - a. By Friday at the latest, the vendor will provide the project schedule for the following week to Project Outreach, Manager Maintenance Planning and Engineering, Manager Sewer Preventive Maintenance, Manager Sewer O&M and/or designated contact persons.