

MANATEE COUNTY GOVERNMENT

NOTICE OF INTENT TO AWARD

A SOLE SOURCE CONTRACT

SUBJECT/TITLE	ICPR4 Real Time Flood Forecasting System	DATE POSTED	MC _____
PROCUREMENT REPRESENTATIVE	Stacia Branco	DATE CONTRACT SHALL BE AWARDED	June 16, 2023
DEPARTMENT	Public Works	CONSEQUENCES IF DEFERRED	
REQUISITION NO.	R082109	AUTHORIZED BY DATE	Jacob Erickson, Purchasing Official

NOTICE OF INTENT TO AWARD A SOLE SOURCE CONTRACT

The Manatee County Procurement Division provides notice of its intent to award a sole source contract with a value of \$193,500.00 with Streamline Technologies, Inc. for the provision of ICPR4 Real Time Flood Forecasting System.

ENABLING/REGULATING AUTHORITY

Federal/State law(s), administrative ruling(s), Manatee County Comp Plan/Land Development Code, ordinances, resolutions, policy.

Manatee County Code of Laws

BACKGROUND/DISCUSSION

Manatee County Procurement Division has completed a due diligence review and intends to procure ICPR4 Real Time Flood Forecasting System from Streamline Technologies, Inc. without conducting a competitive solicitation process for the following reason(s).

The Public Works Department is requesting to purchase the ICPR4 Real Time Flood Forecasting (RTFF). Real Time Flood Forecasting (RTFF) is computer programming which utilizes existing static drainage modeling available from Watershed Management Plans (WMP) and incorporates dynamic weather forecasting of potential rainfall accumulation totals to generate predicted flood staging and potential flood inundation coverage. Programming will perform two (2) simulations daily. The first simulation will automatically retrieve near real-time rainfall and evapotranspiration data to determine present hydrological conditions. The second simulation will utilize medium-range weather forecasting to generate future rainfall accumulation and respective flood stages. Coastal forecasting will be programmed into the rainfall forecast modeling at the confluence point of Bowlees Creek into Sarasota Bay and Pearce Drain at the Braden River to simulate tidal and storm surge effects. Results from both simulations will be uploaded to a dashboard system that can be accessed through a web browser. RTFF programming will provide inundation depth monitoring, known as flood risk points, of building footprints and streets at an interval of 250 feet.

RTFF will utilize the drainage modeling from the Bowlees Creek and Pearce Drain WMP utilizing Inter-Connected Pond Routing (ICPR), Version #4. The existing drainage modeling from these recently completed WMP provide static flood inundation based upon the generated flood stages derived from specific storm events. However, the existing drainage modeling does not account for variable rainfall accumulation across a watershed and/or tidal/storm surge effects.

RTFF will be utilized in the preliminary design and long-term operation of Automated Outfall Structures (AOS) installed on existing stormwater facilities. The AOS system will be remotely automated to open a slide gate, to create additional storage for stormwater runoff and floodwater, preemptively to a forecasted storm event. The RTFF program will provide the advanced modeling of flood stages and flood inundation, which in turn will be utilized to determine the timing, sequence, and drawdown necessary to create additional flood storage preemptively of a forecasted storm event.

Any company that believes they can provide this good or service must provide, in writing, convincing technical data sufficient to support their position to the Manatee County Procurement Division at purchasing@mymanatee.org no later than June 15, 2023.