DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

[ ] New contract [ ] OTR [ ] CO [ ] SS [ ] BW [X] Emergency Previous Contract/Project No: N/A

[ ] Re-Bid [ ] Other LIVING WAGE APPLIES: ___YES __X__NO

Requisition/Project No: RQWS1100025 Term of Contract: Upon Completion

Requisition/Project Title: Emergency Inspection of 54" Wastewater Main

Description: Inspect Prestressed Concrete Cylinder Pipe (PCCP) located in Government Cut Channel and provide detailed condition report

User Department(s): M-DWASD
Issuing Department: DPM Contact Person: MAGGIE REYNALDOS Phone: 305-375-4435
Estimated Cost: $196,068 Funding Source: PROPRIETARY FUNDS

ANALYSIS

Commodity/Service No: 96847 SIC:

Trade/Commodity/Service Opportunities

Contract/Project History of Previous Purchases For Previous Three (3) Years
Check Here [√] if this is a New Contract/Purchase with no Previous History

	EXISTING	2ND YEAR	3RD YEAR
Contractor:	Pure Technologies Ltd		
Small Business Enterprise:			
Contract Value:			
Comments:			

Continued on another page (s): _____Yes _____No

RECOMMENDATIONS

SBE	Set-Aside	Sub-Contractor Goal	Bid Preference	Selection Factor
		%		
		%		
		%		
		%		

Basis of Recommendation:

Signed: _____ Date to DBD: 8/24/11

Date Returned to DPM: _____

MIAMI-DADE COUNTY

SECTION #3
EMERGENCY PURCHASES

NOTE TO DEPARTMENTS: COMPLETE ITEMS MARKED WITH (►)

► **REQUISITION#**RQWS1100025 **P.O. #:**_____ **BCC DATE:** _____

► **ACQUISITION DATE** (Date Order Is Placed)**:8/29/11 (Tentatively)**

► **TITLE:**	54 inch Wastewater Main Condition Assessment Utilizing Remote Field Transformer Coupling Technologies
► **DESCRIPTION:**	Perform internal inspection of 54 inch Wastewater Main located in Government Cut Channel and provide analysis and detailed report of 2 mile section of Prestressed Concrete Cylinder Pipe (PCCP).
► **PURPOSE:**	Performing the condition assessment is prudent due to the fact that the 2 miles of force main are made of the same PCCP material type and vintage that has experienced catastrophic failures in the system within the last year.

►**Department(s):**	►**Allocation(s):**
MDWASD	$ 196,068
*	$

► **TERM OF CONTRACT:**
☐ One ☐ Two ☐ Three ☐ Four ☐ Five *Year(s) Months
☐ Contract Period From _____ to _____
X Upon Completion * From _____ to _____
☐ Upon Delivery * _____ Days A.R.O. (after Receipt of Order)

Special Conditions:
☒ Insurance Type 07
☐ Performance/Payment Bond
☐ Certificate of Competency
☐ Living Wage Applies

SBE Measures:
☒ None
☐ Set Aside ☐ SBE ☐ Micro Enterprise
☐ Bid Preference ☐ SBE ☐ Micro Enterprise
☐ Goal ☐ SBE ☐ Micro Enterprise

Review Committee Date: _____
Item #: _____

► **Number of Price Quotation(s): Requested:** 1 **Received:** _____

Awarded To Low Bidder: * X YES ☐ NO, If "NO", provide explanation in the Comments section

Vendor: Pure Technologies US Inc.	**Vendor:** _____

Contract Value: $196,068

Did Local Preference affect the outcome of the Award?	☐ YES ☒ NO, if "YES", provide detailed explanation in the "Comments" section

UAP Included: ☒ YES ☐ NO
- Will CITT Funds be used? ☐ YES ☒ NO
- Will Federal Funds be used? ☐ YES ☒ NO
- If UAP is not included, **Attach written approval to waive UAP and provide an explanation in the "Comments" section**

SECTION #3
EMERGENCY PURCHASES

provide an explanation in the "Comments" section

► **Justification and Comments:**	Plans for a $190 million Miami-Dade Water and Sewer (WASD) utility tunnel for the Port of Miami dredging project have been scaled-down to a $42 million pipe relocation in place of the complex tunnel construction. To accommodate planned dredging to allow some of the world's largest cargo ships access to the local seaport, the Water and Sewer Department must move a 54-inch PCCP wastewater main that runs through Government Cut, the shipping channel between Miami Beach and Fisher Island. The original idea was not to simply move the pipe, but to build a tunnel that would supplant it as well as increase the system's capacity and replace aging infrastructure. The utility tunnel would have had to be complete by August 2012 to allow for the dredging. Now, the tunnel project is on hold, and the plan instead is to simply move the obstructive wastewater line at a cost of about $42 million. Moving this 54-inch wastewater line will necessitate dredging in the areas adjacent to the existing line. The Department was recently made aware that the pipe material used for the Government Cut force main is of the same PCCP type and vintage as that of the water and waste water force mains that experienced catastrophic failures in our system within the last year. As such, it is critical that an assessment of the condition of said Government Cut force main be done before any work on the replacement of portions of that line are done. Inasmuch as the first phases of the Government Cut Project are scheduled to commence by mid-September, it is imperative that the condition assessment be performed now. Therefore, WASD Director John Renfrow has declared an emergency situation and the department contacted the known global leader in water and wastewater pipeline condition assessment, Pure Technologies US, Inc. WASD requested an emergency proposal, dated 8/15/11 to provide an immediate assessment using Remote Field Transformer Coupling (RFTC) technologies with the results for the pipe sections beneath Government Cut be provided within 48 hours of the completion of the entire 2 mile section of 54-inch PCCP force main Remote Field Transformer Coupling (RFTC) is a non-destructive type of pipeline condition assessment technology was first introduced in 1997. Later versions were incorporated with a new patented technology called Pipe Diver which produced the first free swimming RFTC live PCCP inspection tool in 2007. This free swimming tool can be inserted into a closed pipeline system and operated for up to 36 hours before requiring retrieval and recharging. The advantage that the RFTC technology has over conventional technologies that provide recorded video inspection results is that the RFTC transmits a signal that when combined with the patented software is able to detect and locate the number of damaged or broken prestressing wires located inside the PCCP. All of the results and information are presented in a full assessment report that provides summary of damaged segments of the pipe and also ranks them in quantitative order of number of broken prestressing wires.

Background/Need to Know:	Within the past year, the Department has experienced multiple catastrophic ruptures in PCCP water and wastewater force mains. This assessment report will reveal any significant areas of prestressing degradation that require immediate attention, allowing the department to avert another potential catastrophic rupture.
Potential Issues:	Being proactive and obtaining an immediate pipeline condition assessment will allow the department to plan and take appropriate action to avert another catastrophic rupture.

SECTION #3
EMERGENCY PURCHASES

▶ **Signature(s):**

Gregory D. Hicks, CPPB — 8/21/11
Contact Person — Date

(786) 552-8049
Telephone

OK — 8/22/11

Department Director Approval — 8-23-11
Date

Department of Procurement Management Use Only

Signatures(s):

Procurement Agent — Date

Procurement Supervisor — Date

Procurement Manager — Date

Division Director — Date

Vendor Assistance Section — Date

Task Order – 54-inch Government Cut Force Main

Vincente Arrebola
Assistant Director of Waste Water
Miami-Dade Water and Sewer Department
3071 S.W. 38th Avenue
Miami, Florida 33146

August 15, 2011

Dear Mr. Arrebola,

Pure Technologies U.S. Inc. (Pure) is pleased to offer our services to the Miami-Dade Water and Sewer Department (WASD) for pipeline assessment.

We understand that WASD would like to assess the condition of the 54-inch force main constructed of pre-stressed concrete cylinder pipe (PCCP) that begins at the southern end of Jefferson Avenue (near South Pointe Drive) in Miami Beach, Florida and traverses the Government Cut between Miami Beach and Fisher Island. The force main then follows a route towards the Central District Wastewater Treatment Plant for a total distance of approximately 2 miles. The method of assessment would include the use electromagnetics delivered on the PipeDiver platform.

Access to the WASD pipeline will be through a 24-inch tap located at the intersection of 11th Street and Michigan Avenue on the 54-inch force main owned and operated by the City of Miami Beach. We understand that the City of Miami Beach is managing and executing the effort to install this 24-inch tap.

A completion date for this installation is yet to be determined however; we are reserving the week of August 29, 2011 for the PipeDiver inspection.

This project will deliver to WASD the following:

1. The number of broken pre-stressing wires in each inspected pipe section inspected
2. A performance curve for each design class soil depth combination for each pipe with broken pre-stressing wires calculated using a 3-D non-linear finite element analysis
3. A structural engineering analysis detailing the repair priority for each pipe section with broken pre-stressing wires.

Task Order – 54-inch Government Cut Force Main

This report will provide WASD:

A. Categorization of the structural damage found, allowing WASD to prioritize its rehabilitation program and allocate funds accordingly in an emergency and/or an annual basis.
B. Information needed to extend the useful life of their pipelines using the information as a starting point for a root cause analysis if the pipeline is deteriorating.

Cost Estimate

Pure will deliver the electromagnetic inspection on the PipeDiver platform. The cost associated with this assessment is based on the pricing approved by the County's Department of Procurement Management and listed in the Master Agreement, Appendix B. The cost for this project is detailed in the table below.

Service	Quantity	Unit Cost	Total Cost
PipeDiver Mobilization & Planning *assumes City of Miami Beach will pay 1/3 mobilization, if not full rate will apply.	0.66	$85,000	$56,100
Inspection/Analysis/Reporting: *Results for the pipe sections beneath Government Cut will be provided within 48 hours of the completion of the inspection	2 miles	$69,984	$139,968
Total			$196,068

WASD and Pure's responsibilities are detailed in the Master Agreement, Appendix A.

We look forward to providing these specialized services. If you have any questions or concerns, please do not hesitate to contact me.

Regards,

Mike Garaci
416-574-4446
mike.garaci@puretechltd.com

This Task Order will become effective when approved by WASD.