

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT**  
(COMPLETE ONE SECTION E FOR EACH KEY PERSON.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
<b>Tom Willis, PE, MBA</b>	<b>Hydraulic Engineer</b>	<b>42</b>	<b>12</b>

15. FIRM NAME AND LOCATION (City And State)

**MSMM Engineering, LLC - New Orleans, LA**

16. EDUCATION (DEGREE AND SPECIALIZATION)

BS, Civil Engineering, Louisiana State University, 1981  
MBA, Louisiana State University, 1989

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

Professional Engineer/Civil (1991): LA (28205)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, Etc.)

Mr. Tom Willis is a Senior Hydraulic Engineer at MSMM where he primarily conducts H&H analyses of drainage mitigation projects for USACE. Mr. Willis has provided hydraulic analyses and modeling, inclusive of HEC-RAS and HEC-HMS for the USACE MVN district under programs such as Silver Jackets, Section 219 Environmental Infrastructure, and the PAS Program.

**19. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
a	<b>Southern University Drainage Outfall Ravine and Riverbank Instability Study, Baton Rouge, LA</b>	<b>2020</b>	<b>ANTICIPATED 2024</b>
	(3) DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm <b>Scope:</b> As part of the Silver Jackets program at the USACE New Orleans District, MSMM performed a feasibility study to identify the appropriate courses of action to resolve ongoing erosion and flooding problems on the Southern University campus. Mr. Willis ran a HEC-RAS model and developed project alternative designs to address erosion problems covering several areas on campus. His analysis provided solutions for the following issues: paving repairs and ravine side deterioration area, Baranco-Hill health center perimeter and outfall bank land-loss areas, and the outfall ravine channel degradation area. Through his analysis our design team was able to show positive benefits of these design alternatives and provided Southern University with detailed project alternatives. <b>Cost:</b> \$4M <b>Fee:</b> \$220K <b>Role:</b> Hydraulic Engineer		
b	<b>Louisiana Intermodal Terminal, Port of New Orleans, Chalmette, LA</b>	<b>ONGOING</b>	<b>ANTICIPATED 2025</b>
	(3) DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm <b>Scope:</b> MSMM is currently providing hydraulic modeling and drainage design solutions to the Port of New Orleans as part of their new Intermodal Terminal in St. Bernard Parish. The existing storage has been modeled in subbasins utilizing the HEC-HMS model. Mr. Willis performed this analysis by using rainfall runoff modeling to develop flow hydrographs which were used in the unsteady HEC-RAS models. Rather than provide tables with the flow hydrograph information at various locations, the user (Port) is referred to the digital HEC-RAS model output that contains the flow hydrographs. This allowed the Port to make alternative selections. With a selected alternative, detailed modeling will commence, and Mr. Willis will lead the design of the drainage mitigation solution. <b>Cost:</b> \$135M <b>Fee:</b> \$1.8M <b>Role:</b> Hydraulic Engineer		
c	<b>USACE Silver Jackets, Stormwater Watershed Management Study, Jefferson Parish, LA</b>	<b>2021</b>	<b>N/A</b>
	(3) DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm <b>Scope:</b> Through a Silver Jackets project sponsored by USACE MVN and Jefferson Parish, MSMM provided a Watershed Management Plan (WMP). The purpose was to provide an assessment of how flood stages will be affected by projected changes in future rain and sea-level conditions and to recommend strategies for mitigating increased flood loss damages. Mr. Willis performed the hydraulic modeling utilizing the EPA SWMM model to determine the existing and future conditions on over 50 percent of the Parish inside the levees for the 10-year, 25-year, and 100-year storm events. Comparative future conditions were assessed using Technical Paper 40 versus NOAA's 2100 intermediate Sea Level Rise Project which anticipates a 5.8-foot rise in sea level. Future land use was based on the newly updated Jefferson Parish Edge 2040 land use information. The Parish EPA SWMM numerical hydrologic-hydraulic models were used in assessing impacts. The model analysis indicated that the existing pump system has sufficient capacity despite rising sea levels, but the utilization and power usage are increased so maintenance and power provisions should be considered. <b>Cost:</b> \$21.5M <b>Fee:</b> \$1.5M <b>Role:</b> Hydraulic Engineer		