DONOHUE

AMENDMENT NO. 1 to
ENGINEERING SERVICES AGREEMENT
Task Order 6A (Project)
Original Agreement Executed September 13, 2019

This Amendment is by and between:

Heart of the Valley Metropolitan Sewerage District (Owner)
801 Thilmany Road
Kaukauna, WI

and

Donohue & Associates, Inc. (Donohue)
3311 Weeden Creek
Sheboygan, WI 53081

Who agree to amend the original Agreement, as follows:

PART I – B. SCOPE OF SERVICES

As part of the original Task Order 6A, Donohue built and calibrated a MIKEURBAN collection system model. This model replaces the previous collection system model calibrated in 2006. The MIKEURBAN model is a more powerful, commercially available collection system model that considers antecedent moisture. The services have been modified to delete/include the activities below.

Task(s)	Description	Services
~~130~~	~~Quantify Changes to I/I Flows~~ [Delete this task. The lack of a consistent correlation makes this unreliable and ill advised.]	~~Perform regression analyses to develop functions to "convert" 2006 ultrasonic flow data to its laser data equivalent. Run the 2006 rainfall and temperature data through the re-calibrated model and compare model results to corrected measured flows. Quantify how much I/I flows have changed since the original model calibration for each community. Quantify the change attributed to the updated metering methods.~~
131	2022 Model Calibration	Recalibrate the MIKEURBAN model to 2022 flow, rainfall, and temperature data.
140	2022 Flow Frequency Analysis	Run a 50-year Long-Term Simulation (LTS) through the recalibrated MIKEURBAN model. Develop flow frequency curves at each communities' connection point(s). Determine the level-of-service (LOS) for the HOV interceptor system. Estimate the frequency with which excessive flows and water levels are likely to occur and where. Determine the frequency of WRRF bypasses. Approximate the available pipe capacity throughout the HOV system. Identify elements of the system that would need to be improved to provide a greater LOS.

150	2021 I/I Analysis	Run a "Typical Year" through the MIKEURBAN model calibrated to 2021 flow and rainfall data. Quantify and normalize each communities' inflow and infiltration (I/I) using industry standard metrics including gallons*capita*day (gpcd), gpd/inch*diameter*miles, capture coefficient, etc.
151	2022 I/I Analysis	Run a "Typical Year" through the MIKEURBAN model calibrated to 2022 flow and rainfall data. Quantify and normalize each communities' inflow and infiltration (I/I).
160	Workshop & Meetings With Customer Communities	Conduct an online webinar / Zoom meeting with customer communities to present the revised approach to annual wet-weather evaluations. Meet individually with customers and their representatives to present their performance.
170	Commission Meetings	Prepare for and conduct one Commission meeting to present results.
180	Prepare Report	Document the update to the collection system model and all analyses in a Draft Report. Upon receipt of comments, prepare and submit a Final Report.

PART III – A. COMPENSATION

Compensation for the services set forth in Part I shall be increased $43,950, resulting in a total contract amount of $79,980 for Task Order 6A ($36,030 Original + $43,950 Amendment 1).

Levels of Effort (Hours) by Task

Project Roles	Senior Advisor	Senior Engineer	Junior Engineer
Team Members	Gerbitz	Sticklen	BGrunwald
	$270	$195	$145

Labor Fees and Expenses by Task

AM 1 Amendment 1				Total Hours	Labor Fee	Travel Expenses	Totals
130 DELETE: Quantify Changes to I/I		-16	-30	-46	-$7,470		-$7,470
131 2022 Model Calibration		40		40	$7,800		$7,800
140 2022 Flow Frequency Analysis		40		40	$7,800		$7,800
150 2021 Typical Year I/I Analysis		32	16	48	$8,560		$8,560
151 2022 Typical Year I/I Analysis		12	16	28	$4,660		$4,660
160 Prepare for and Conduct Meetings with Customer Communities: Webinar / On-Site	8	32		40	$8,400	$600	$9,000
165 Prepare for an Attend Commission Meeting	2	10		12	$2,490	$450	$2,940
170 Prepare Draft and Final Report	2	40	16	58	$10,660		$10,660
Totals	12	190	18	**220**	**$42,900**	**$1,050**	**$43,950**

APPROVED FOR OWNER

By: _____

Printed Name: _____

Title: _____

Date: _____

APPROVED FOR DONOHUE

By: _____

Printed Name: Michael W. Gerbitz, PE

Title: Senior Vice President

Date: _____