

**WORK ASSIGNMENT NO. 22
PROJECT #6091380
CHANGE ORDER #1**

**NORTH WATER RECLAMATION FACILITY IMPROVEMENTS
HEADWORKS SECOND GRIT SYSTEM**

August 21, 2019

Pursuant to the Manatee County, Florida, Agreement No. 17-0523JE for Professional Services for Utility Engineering entered into by and between the COUNTY OF MANATEE, FLORIDA, hereinafter referred to as the "COUNTY" and Kimley-Horn and Associates, hereinafter referred to as the "Consultant", a determination has been made by the COUNTY that there is a need for the performance of or rendering of services by the Consultant of a certain "Work Assignment" under the purview of said Contract, and the Consultant is hereby authorized to perform or render the particular services of work described as follows:

**TITLE OF THE PROJECT: NORTH WATER RECLAMATION FACILITY IMPROVEMENTS
HEADWORKS SECOND GRIT SYSTEM**

TASKS OF PROFESSIONAL SERVICES AUTHORIZED:

Consultant shall perform the additional services identified and specifically detailed in attached Scope of Services, Task 1.2. These services are in addition to those previously provided in the original scope of services. This work assignment shall remain in effect until completion of the project.

Compensation to the Consultant for rendering all of the above identified additional services and products shall not exceed:

Description	Total
Original Cost for Work Assignment No. 1	\$577,460.00
Change Order No. 1 (Replacement of Existing Grit Pumps)	\$8,827.00
Revised Total Fee for Work Assignment No. 15	\$586,287.00

**MANATEE COUNTY GOVERNMENT
WORK ASSIGNMENT NO. 22
CHANGE ORDER NO. 1**

**NORTH WATER RECLAMATION FACILITY IMPROVEMENTS
HEADWORKS SECOND GRIT SYSTEM**

PROJECT #6091380

Kimley-Horn and Associates, Inc.
100 2nd Avenue South, Suite 105N
St Petersburg, FL 33701

By:



8/21/19

Wade Wood, P.E.
Associate

COUNTY OF MANATEE, FLORIDA

By:

Purchasing Official

Date:

**NORTH WATER RECLAMATION FACILITY IMPROVEMENTS
HEADWORKS SECOND GRIT SYSTEM
WORK ASSIGNMENT #22
CHANGE ORDER #1**

**SCOPE OF SERVICES
KIMLEY-HORN AND ASSOCIATES, INC.
August 21, 2019**

OBJECTIVE

During the investigations on the existing Headcell and Slurry Cup, it was determined the existing grit pumps do not have the capacity to properly create a vortex within the Slurry Cup. The Slurry Cup is designed to have a capacity of 300 gpm, the grit pumps can only produce approximately 260 gpm. The difference is creating operational challenges.

TASK 1.2 – Replacement of Existing Grit Pumps

The design of the replacement of the existing grit pumps and the addition of the new I/O points will be included in the 60%, 90%, and Final design documents.

PROJECT SCHEDULE

To match original schedule

PROJECT SUBCONSULTANTS

Tricon Consulting Engineers

PROJECT WORK PLAN PERSON-HOUR ESTIMATE

Project Name: NWRF Headcell Addition
 Project Number: 0
 Date Prepared: 8/21/2019
 Estimated By: Wade Wood

Estimated Project Duration: _____ months
 Design, Permitting, & Bidding: _____ months
 Construction: _____ months
 Total: _____ months

KHA Task # Subtask ID Number	KHA Task Name Subtask Name/Description	Principal	Sr Proj Engineer	Project Manager	Sr. Design Eng	Project Eng	Sr CADD Tech	Admin Asst	Total Labor Hours	KHA Labor Total	Other Direct Cost	Subcons Cost	Subcons Cost Markup 5%	Total Fee
		225.0	200.0 ✓	190.0	150.0	140.0 ✓	100.0 ✓	80.0 ✓						
1.2	Preparation of Construction Documents													
	Replacement of Existing Grit Pumps		4			16	16	2	38	\$4,800		\$3,835	\$192	\$8,827
	Subtotal Task 1 (Hours)	0	4	0	0	16	16	2	38	\$4,800	\$0	\$3,835	\$192	\$8,827
	Project Total								38	\$4,800	\$0	\$3,835	\$192	\$8,827

✓ ✓ ✓ ✓

August 29, 2017

**Mr. Kevin Gerszuny, E.I.
Kimley-Horn and Associates, Inc.
655 North Franklin Street
Suite 150
Tampa, Florida 33602**

Re: Manatee County NWRf Secondary Grit System Additional Scope and Fee

Dear Mr. Gerszuny :

Tricon Engineering is pleased to submit this proposal for Electrical Engineering services to you.

Please feel free to contact me for any other clarifications or questions you may have in regards to this matter.

Scope of Professional Services

Design Phase

- 1) Basic services include providing contract documents for replacing two (2) existing 5 HP pumps with two (2) new 10 HP pumps. This work shall include the associated control panels for the new pumps.
- 2) The addition of new I/O to the existing to the existing grit snail/slurry cup control panel (I/O to be added is yet to be determined).

This work shall include :

- a) Design of power and control requirements for the new 10 HP pumps.
- b) Design for the integration of the additional I/O into the existing NWRf SCADA system.

Items to be provided to Tricon Engineering by Kimley-Horn :

- 1) Voltage, phase and full load amperage for the new 10 HP pumps.
- 2) Identify the additional I/O to be integrated into the existing SCADA system.

Construction Phase Services

Basic services include providing support to Manatee County during the NWRP Secondary Grit System project:

The work shall include :

- 1) Review of contractor's shop drawing submittals for all electrical and communications components.
- 2) Respond to Contractor's Requests for Information (RFI's) during construction.
- 3) Provide record drawings.

Compensation

Tricon Engineering shall execute the Design Phase services for the NWRP Secondary Grit System project, as described previously, for the Not to Exceed amount of :

\$2,860.00 (Two thousand, Eighty hundred Sixty dollars).

Tricon Engineering shall execute the Construction Phase services for the NWRP Secondary Grit System project, as described previously, for the Not to Exceed amount of :

\$975.00 (Nine hundred Seventy Five dollars).

We would like to thank you for the opportunity to provide you with a proposal for this work.

Sincerely,

TRICON ENGINEERING



Timothy Thomas, P.E.

MANATEE COUNTY
NWRF Second Grit System Additional Services
DESIGN FEE ESTIMATE

TASK	Description of Activity	Principal	Senior PM	Sr Project Engineer	Project Engineer	Designer	Constr Manager	CADD Tech	Clerical	Total Manhours	Task Cost
1	Electrical/Controls Assessment	0	0	4 ✓	0	0	0	0	0	4	\$520
										0	
	Data Collection/ Field Investigation			4						4	\$520
2	Construction Documents	0	0	12 ✓	0	0	0	9 ✓	3 ✓	24	\$2,340
	60% Drawings and Specifications			6				6	1	13	\$1,235
	90% Drawings and Specifications			4				2	1	7	\$715
	Final Drawings and Specifications			2				1	1	4	\$390
		0	0	16 ✓	0	0	0	9 ✓	3 ✓	28	\$2,860 ✓
		Principal QA/QC	Senior PM	Sr Project Engineer	Engineer	Designer	Constr Manager	CADD Tech	Clerical		
	Hourly Rate	\$193	\$165	\$130 ✓	\$110	\$87	\$110	\$65 ✓	\$65 ✓		
	Total Dollars	\$0	\$0	\$2,080 ✓	\$0	\$0	\$0	\$585 ✓	\$195 ✓		

MANATEE COUNTY
NWRF Second Grit System Additional Services
CONSTRUCTION ADMIN FEE ESTIMATE

TASK	Description of Activity	Principal	Senior PM	Sr Project Engineer	Project Engineer	Designer	Constr Manager	CADD Tech	Clerical	Total Manhours	Task Cost
3	Construction Phase	0	0	6 ✓	0	0	0	1 ✓	2 ✓	9	\$975
	Shop Dwg Review			4					1	5	\$585
	RFI's			1					1	2	\$195
	Record Drawings			1				1		2	\$195
		0	0	6 ✓	0	0	0	1 ✓	2 ✓	9	\$975 ✓
		Principal QA/QC	Senior PM	Sr Project Engineer	Engineer	Designer	Constr Manager	CADD Tech	Clerical		
Hourly Rate		\$193	\$165	\$130 ✓	\$110	\$87	\$110	\$65 ✓	\$65 ✓		
Total Dollars		\$0	\$0	\$780 ✓	\$0	\$0	\$0	\$65 ✓	\$130 ✓		