# ATTACHMENT 1 PROJECT ASSIGNMENT SCOPE OF WORK AND PROJECT SCHEDULE

Project: Solid Waste Disposal Plan/Quill Wastewater Treatment Facility

Project Number: On Call Agreement No. 2014-0030I-PW/PL and Project Assignment 2015-

0293-PW/PL

Project Location: Quill Wastewater Treatment Facility, Santa Fe County

Santa Fe County (County) Utilities Division operates the Quill Wastewater Treatment Facility under a lease with the NM Department of Corrections, General Services Department. The facility has accumulated dry sludge that must be disposed of in a cost efficient manner that complies with all state and federal regulations. Dry sludge, pond liner debris and dirt need to be properly disposed. The sludge and debris are currently being stored at the facility in two locations: (1) the empty east primary lagoon which is off-line, and (2) a temporary sludge storage area to the south of the effluent storage lagoon. Because the sludge is mixed with dirt, scraps of synthetic liner, sharps and coarse debris, landfill disposal is determined to be the only practical option. The solid waste disposal plan to be completed under this Project Assignment may be used as direction and support for a future heavy equipment contractor to complete the physical transfer and disposal of the sludge and debris.

#### PROJECT ASSIGNMENT NO. 1 - SCOPE OF SERVICES

A. Basic Services: Engineer will provide engineering consulting services to develop and implement a solid waste disposal plan (SWDP) to accomplish the removal and disposal of sludge and debris from the Quill Wastewater Treatment Facility which is owned and operated by the County. The SWDP and its implementation will comply with requirements at 40 CFR Part 257, 40 CFR Part 258, 40 CFR Part 503 and applicable provisions of the NMAC 20.9.8. (Solid Waste, Special Waste Requirements).

<u>Task 1 – Project Management</u>. Engineer will conduct a kickoff meeting and site evaluation meeting to review the existing site and the temporary sludge storage areas with the County. Engineer will hold additional coordination meetings to review the project deliverables and assess any changes that are required. Schedule update will be provided to the County as needed to keep the County informed of the current project. Meeting minutes will be prepared and distributed to the County.

<u>Assumptions</u>: Coordination meetings will be held by teleconference and meeting minutes will be provided by e-mail.

Deliverables: Meeting minutes and correspondence.

<u>Task 2 – Quill Wastewater Treatment Facility Site Survey</u>. Engineer will conduct a field survey of the temporary sludge containment area and the existing lagoon for quantity verification purposes and map out access and contractor staging area locations. During the site evaluation meeting, Engineer will discuss site-specific constraints, access requirements, and any other requirements that bidders will need to be appraised of during their bid preparation. The information obtained as part of the site survey will be used to develop the SWDP and required attachments.

Assumptions: (1) The estimated volume of stored sludge and debris to be surveyed for disposal is approximately 1,200 to 1,500 cubic yards, and (2) the County will coordinate access and/ or escorts to the Quill Wastewater Treatment Facility for Task 2 survey to be accomplished.

<u>Deliverables</u>: A volumetric survey and a summary of project conditions to be included in the SWDP.

<u>Task 3 — Evaluations of Landfilling Options and Costs.</u> Engineer will evaluate tow landfill options for the disposal of the stored sludge and liner debris. The two closest landfills that are permitted for industrial solid waste are the Rio Rancho Sanitary Landfill in Rio Rancho, NM, and the Estancia Valley Regional Landfill, in Estancia, NM. With the sample data to be acquired in Task 4, Engineer will coordinate with the two solid waste facilities to determine their availability to accept the sludge and debris. Engineer will prepare a Technical Memorandum describing the conditions related to special landfill requirements, tipping costs, transport costs, and other related impacts. Based on the evaluation, Engineer will recommend a preferred disposal location.

Assumptions: (1) The Caja Del Rio Landfill in Santa Fe County is not permitted to accept industrial solid waste which is what the stored sludge and liner debris are considered to be classified as, and (2) the County will negotiate and facilitate any agreement between the County and the recommended landfill that may be necessary to implement the SWDP.

Deliverables: A Technical Memorandum with disposal site recommendation.

Task 4 – Sampling and Analytical Testing. Based on the volumetric survey completed in Task 2, Engineer will negotiate a sampling plan with the New Mexico Environment Department, Solid Waste Bureau (NMED-SWB), for each stockpile. According to NMAC 20.9.8.16, Sludge currently requires samples be taken at a rate of one sample per 100 cubic yards. This will require approximately 15 samples to be tested. Engineer will attempt to obtain a reduction in sampling requirements based on the age of the sludge piles and the consistency of the material. Engineer will facilitate a meeting between the County, Engineer and the NMED-SWB to discuss the overall project goals and the proposed sampling plan if necessary. For the purposes of developing the project budget, a total of 15 samples have been included. If fewer samples are required, the net difference

in the number of samples will be credited back to the County at a rate of \$1,000 per sample.

Once the sampling plan has been reviewed and approved by all the parties, the Engineer will contract with a testing laboratory to obtain the grab samples and perform the analysis. For the purpose of developing the project budget, a total of 15 samples have been included. Engineer will review the lab results of the sludge samples to ensure that they meet the sludge analysis parameters set forth in NMAC 20.9.8.16.D. The Engineer will notify the County if the sludge samples identify parameters that are outside the acceptable range of tolerance for disposal.

<u>Assumptions</u>: Developing a contingency plan in the event that sludge samples are outside the acceptable range of tolerance for disposal is not included in this Project Assignment No. 1 and this scope of services. The Engineer will work with the County to identify possible alternatives and then develop a contingency plan as an additional assignment for services if requested.

<u>Deliverables:</u> (1) Meeting minutes, correspondence, (2) Testing Plan, and (3) Test Results.

Task 5 – Solid Waste Disposal Plan. The Engineer will prepare a SWDP in accordance with NMED-SWB Sludge Disposal Management Plan Preparation Guidelines. In accordance with the special waste requirements for Sludge as addressed under the NM Solid Waste Rules, NMAC 20.9.8.16, the Engineer will use prior and past project experience to develop a SWDP that meets current requirements for the Quill Wastewater Treatment Facility sludge. The SWDP will include information on the current treatment facility's operation, origin of the sludge, the transportation plan, sludge sampling, and analysis, and a contingency plan, to be used in the event of an unplanned release or spill. Once a draft plan has been developed, it will be sent to the County for review and comment prior to submitting the plan to NMED-SWB for approval.

Assumptions: One draft and one final version of the SWDP will be submitted.

<u>Deliverables:</u> 10 copies paper and electronic (PDF and Word) files and any related documents of the draft and final versions of the SWDP will be provided.

<u>Task 6 – Assistance during Procurement Phase</u>. The County will procure the services of a contractor to implement the SWDP. The Engineer will prepare technical specifications to be included in the bid package. The Engineer will provide bidding support to answer questions and issue addenda as needed during the procurement phase.

Assumptions: (1) The County will develop bid documents, pay for printing and distribution, and develop bid tabulation and recommendation of award with guidance

from the Engineer, and (2) Implementation of the SWDP will be bid as a single contract for removal and disposal of sludge and debris.

<u>Deliverables</u>: (1) Addenda; (2) Summary of submittal; and (3) Construction observation reports.

Task 7 – Project Oversight during Sludge Removal and Disposal. During the removal and disposal of the sludge, the Engineer will conduct periodic on-site observation to ensure the SWDP is being implemented in accordance with the requirements. The Engineer's engineer of record will remain on-call during the execution of the SWDP to respond to questions, attend progress meetings, and provide documentation for project closeout.

Assumptions: Full time inspection is not required and construction reports to the County will be delivered by e-mail.

<u>Deliverables:</u> Construction observation reports.

# B. Additional Services: Not applicable.

C. Project Assignment Schedule and Costs. Costs stated below are consistent with Contractor's Schedule of Hourly Rates stated in On Call Agreement 2014-0030I-PW/PL. Costs include all direct costs, overhead, profits, markups, and cost of subcontracted services associated with the service.

PROJECT ASSIGNMENT NO	O. 1 SERVICES	COST
Project Management	10%	\$ 3,500.00
Preliminary Design Site Survey Evaluation of Landfilling Options and Cost	20%	\$ 3,600.00 \$ 1,900.00
Final Design Phase (Sampling & Analytical Testing and SWDP)	40%	\$16,650.00
Bidding and Negotiation Phase	5%	\$ 3,700.00
Construction Phase Project oversight during	20%	\$ 7,900.00
sludge removal & disposal	5%	\$ 1,400.00
Total Cost of Project Assignment No. 1	100%	\$38,650.00 (exclusive of NM grt)

# **D. Engineer's Consultant list.** See Exhibit F attached hereto.

SANTA, FE COUNTY	
Katherine Miller County Manager	Date: 7.7.15
Approved as to form  Politic Da fr 1855  Gregory S. Shaffer  Santa Fe County Attorney	Date: <u>4-26-1</u> 5
Finance Department  Carole H. Jaramillo  Finance Director	Date: 7/5/15
ENGINEER  Signature  Phone Phone has 0500  Print Name	Date: <u>639-15</u>

# EXHIBIT F SANTA FE COUNTY CONSULTANT LIST

# PROJECT NAME: SOLID WASTE DISPOSAL PLAN QUILL WASTEWATER TREATMENT FACILITY

PRIMARY CONSULTANT	SAMPLING & ANALYTICAL
Company Name: Bohannan Huston	ANALYSIS
Consultant Name: Rob Richardson	Company Name: Hall Environmental
Address: 7500 Jefferson Street, NE	Consultant Name: Karen Stasiunas
Albuquerque, New Mexico 87109-4335	Address: 4901 Hawkins, NE
	Albuquerque, New Mexico 87109
Ph. No.: 505-798-7878	
Fax No.: 505-798-7988	Ph. No.: 505-345-3975
E-mail: rrichardson@bhinc.com	Fax No.: 505-345-4107
	E-mail: kms@hallenvironmental.com
ARCHITECTURAL SERVICES	SURVEYING SERVICES
Company Name:	Company Name:
Consultant Name:	Consultant Name:
Address:	Address:
Ph. No.:	Ph. No.:
Fax No.:	Fax No.:
E-mail:	E-mail:
STRUCTURAL ENGINEERING	GEOTECHNICAL SERVICES
<u>SERVICES</u>	Company Name:
Company Name:	Consultant Name:
Consultant Name:	Address:
Address:	
Ph. No.:	Ph. No.:
Fax No.:	Fax No.:
E-mail:	E-mail:

1. Name of Project: Quill WWTF 2. Client: Santa Fe Count	of Project: Quill WWTF Si 2. Client: Santa Fe County	IF SWDP					3. Date of propos	Date of proposal:	5/11/15				
4. PIC/Project Manager: Rob Richardson/Roy Gibson	er: Rob Richard	Ison/Roy Gib	son				5. Prepare	d by:	RPR/RGG				
Bohomon A Lineton				EXHIBIT A	A								
DOLIAI II IAI I 🕿 MUSTOII	Engr 7.	Engr. 6 Hours	Engr. 5 Hours	Engr. 4 Houre	Engr. 3	Engr. 2 Hours	Engr. 1	Technical Specialist 5	Admin. Asst. 6	Survey	Total	Fixed Costs &	Total
Fee Schedules Rates:			\$150.00	\$135.00	\$120.00	\$100.00	\$90.00	\$95.00	. Caa	\$225.00	e inol	Subconsulains	B
TASK 1 -PROEJCT MANAGEMENT (LS)	\$ X E	141	400					で一般ない		1 1 1			
1.1 Kick-off Meeting at Facility	4			4					_		6		\$1,540.00
1.2 Progress meetings/minutes (6 max)				0					3		12		\$1,515.00
1.3 Laboratoy Sampling	1	80 40 00 00 00 00	c		C	C	c				e 3		\$425.00
TASK 2 - SITE EVALUATION	4		0	2			9	9	4		77		\$3,480.00
2.1 Site Evaluation	-			4							2	* 32.1%	\$765.00
										12	12	\$100.00	\$2,800.00
SUBTOTAL: TASK 2 - SITE EVALUATION  TASK 3 EVALUATION OF LANDELL ING OBTIONS AND		0	0	4	0	0	0	0	0		17	\$100.00	\$3,565.0
COST ESTIMATE		V											
3.1 Cost Estimate	-			4				2			7		\$955.00
3.2 Landfilling Evaluation	← c	c	c	4 0	c	c	-	2	C	c	7	000	\$955.00
TASK 4 - SAMPLING AND ANALYTICAL TESTING (LS)	1					0						9	200
4.1 Develop Testing Plan	-			2				4			7		\$875.00
4.2 Coordination with Stakeholders on Testing Plan	1			4							5		\$765.00
4.3 Sample Testing													\$15,000.00
TASK 5 - SOLID WASTE DISPOSAL PLAN (LS)	7			D	>			4			71.	\$ 15,000.00	\$16,640.00
5.1 SWDP Draft/Final	8			40				12	5		19	\$100.00	\$7,915.00
SUBTOTAL: TASK 5 - SOLID WASTE DISPOSAL PLAN TASK 6 - ASSISTANCE DURING PROCUREMENT PHASE (LS)	s) 3	0	0	40	0	0	0	12	O	0	61	\$ 100.00	\$7,915.00
c 1 Prenare Cumlemental Technical Charifications	6			12			in the second	が表記 200mm	4		60		\$2 470 00
6.1 Respond to Bidder Questions/Addendum	•			4					2		9		\$740.00
ج Provide guidance to SFC on recommendation of award	1			2							6		\$495.00
SUBTOTAL: TASK 6 - ASSISTANCE DURING PROCUREMENT	3	0	0	18	0	0	0	0	9	0	27	\$0.00	\$3,705.00
TASK 7 - PROJECT OVERSIGHT DURING SLUDGE REMOVAL AND DISPOSAL (LS)													
7.1 Periodic Site Visits (2)				10							10	\$100.00	\$1,450.00
SUBTOTAL: TASK 7 - PROJECT OVERSIGHT	0	0	0	10	0	0	0	0	0	0	10	\$100.00	\$1,450.00
TOTAL DELICITION AND PET	46	c	C	00	c	C	c	20	16	12	162	15300	38 665



Project No. 2015-0293-PW/PL Task Order # - Exhibit A

# Quill Wastewater Treatment Facility Development of a Solid Waste Disposal Plan

#### A. PROJECT DESCRIPTION

Santa Fe County Utilities (SFCU) operates the Quill Wastewater Treatment Facility (QWWTF) under a long-term lease with the New Mexico Department of Corrections and the New Mexico General Service Department. The QWWTF has accumulated dry sludge that must be disposed of in a cost effective manner that meets all state and federal rules and regulations. Dry sludge, pond liner debris and dirt in need of disposal are currently being stored at the QWWTF in two locations; (1) the empty east primary lagoon, which is now off-line, and (2) a temporary sludge storage area to the south of the effluent storage lagoon. Because the sludge is mixed with dirt, scraps of synthetic liner, sharps and coarse debris, landfill disposal had been determined to be the only practical option. This project involves the development of a Solid Waste Disposal Plan (SWDP) that is approved by the compliant with 40CFR 257/258 and/or 40 CFR 503, and that can be used as direction/support for a future heavy equipment/trucking contractor (to be contracted under IFB) to complete the actual transfer and disposal of the sludge and debris.

### **B. SCOPE OF SERVICES**

Bohannan Huston, Inc., (BHI) will provide engineering consulting services to develop and implement a solid waste disposal plan (SWDP) to remove municipal sludge from the Quill Wastewater Treatment Facility in Santa Fe County (County). The tasks associated with these services are described below:

### Task 1 - Project Management

BHI will conduct a kickoff meeting and site evaluation meeting to review the existing site and the temporary sludge storage areas with the County. BHI will hold additional coordination meetings to review the project deliverables and assess any changes that are required. Schedule updates will be provided to Santa Fe County as needed to keep the county informed of the current project. Meeting minutes will be prepared and distributed to the County.

### **Assumptions:**

- 1. Coordination meetings will be held via teleconference
- Meeting minutes will be provided via email.

#### Deliverables:

1. Meeting minutes, correspondence

## Task 2 - Quill Wastewater Treatment Facility Site Survey

BHI will conduct a field survey of the temporary sludge containment area and the existing lagoon for quantity verification purposes and map out access and contractor staging area locations. During the site evaluation meeting, BHI will discuss site-specific constraints, access requirements, and any other requirements that bidders will need to be apprised of during their bid preparation. The information obtained as part of the site survey will be used to develop the SWDP and required attachments.

# **Assumptions:**

- 1. The estimated volume of stored sludge and liner debris to be surveyed for disposal is approximately 1,200- 1,500 cubic yards.
- 2. Santa Fe County will coordinate access/escorts to the Quill WWTP for the survey to be accomplished.

#### **Deliverables:**

- 1. Volumetric survey
- Summary of project conditions to be included in the SWDP

#### Task 3 – Evaluation of Landfilling Options and Costs

BHI will evaluate two landfill options for the disposal of the stored sludge and liner debris. The two closest landfills that are permitted for industrial solid waste are the Rio Rancho Sanitary Landfill and the Estancia Valley Regional Landfill. With the sample data to be acquired in Task 4, BHI will coordinate with the two solid waste facilities to determine their availability to accept the sludge. We will prepare a technical memo describing the conditions related to special landfill requirements, tipping costs, transport costs, and other related impacts. Based on the evaluation, BHI will recommend a preferred disposal location.

### **Assumptions:**

- The Caja Del Rio Landfill in Santa Fe is not permitted to accept industrial solid waste which is what the stored sludge and liner debris are considered to be classified as.
- 2. Santa Fe County will create any required resolutions, ordinances, MOU's, contracts, etc., that may be required between the County and the recommended landfill.

#### Deliverables:

1. Technical Memorandum with disposal site recommendation.

# Task 4 – Sampling and Analytical Testing

Based on the volumetric survey from Task 2, BHI will negotiate a sampling plan with the NMED-SWB for each stockpile. NMAC 20.9.8.16 – Sludge currently requires samples be taken at a rate of one sample per 100 cubic yards. This will require approximately 15 samples to be tested. We will attempt to obtain a reduction in sampling requirements based on the age of the sludge piles and the consistency of the material. BHI will facilitate a meeting between the County, BHI, and the NMED-SWB to discuss the overall project goals and the proposed sampling plan if necessary. For the purposes of developing the project budget, a total of 15 samples have been included. If fewer samples are required, the net difference in the number of will be credited back to the County at arate of \$1,000 per sample.

Once the sampling plan has been reviewed and approved by all parties, BHI will contract with a testing laboratory to obtain the grab samples and perform the analysis. For the purposes of developing the project budget, a total of 15 samples have been included. BHI will then review the lab results of the sludge samples to ensure that they meet the sludge analysis parameters set forth in NMAC 20.9.8.16.D. BHI will notify the County if the sludge samples identify parameters that are outside the acceptable range of tolerance for disposal.

# Assumptions:

1. Developing a contingency plan in the event that sludge samples are outside the acceptable range of tolerance for disposal is not included in this scope of services. BHI will work with the County to identify possible alternatives and then develop a contingency plan as an additional service if requested.

#### **Deliverables:**

- 1. Meeting minutes, correspondence
- 2. Testing Plan
- 3. Test Results

# Task 5 - Solid Waste Disposal Plan

BHI will prepare a SWDP in accordance with NMED-SWB Sludge Disposal Management Plan Preparation Guidelines. In accordance with the special waste requirements for sludge as addressed under the New Mexico Solid Waste Rules, 20.9.8.16 NMAC, BHI will use prior and past project experience to develop a SWDP that meets current requirements for the Quill Wastewater Treatment Facility sludge. The SWDP will include information on the current treatment facility's operation, origin of the sludge, the transportation plan, sludge sampling, and analysis, and a contingency plan.

to be used in the event of an unplanned release or spill. Once a draft plan has been developed, it will be sent to the County for review and comment prior to submitting the plan to the Solid Waste Bureau for approval.

# **Assumptions:**

1. One Draft and one Final version of the SWDP will be submitted.

#### **Deliverables:**

1. 10 copies paper and electronic (PDF & Word) files and any related documents of the Draft and Final versions of the SWDP will be provided

# Task 6 - Assistance during Procurement Phase

Santa Fe County will bid the project through its procurement department. BHI will prepare technical specifications to be included in the bid package. BHI will provide bidding support to answer questions and issue addenda as needed during bidding.

## **Assumptions:**

- 1. SACU will develop bid documents, pay for printing and distribution, and develop bid tabulation and recommendation of award with guidance from BHI.
- Implementation of the SWDP will be bid as a single contract for removal and disposal.

#### Deliverables:

- 1. Addenda
- 2. Summary of submittal
- 3. Construction observation reports

#### Task 7 – Project Oversight during Sludge Removal and Disposal

During the removal and disposal of the sludge, BHI will conduct periodic on-site observation to ensure the plan is being implemented in accordance with the requirements. The engineer of record will remain on-call during the execution of the plan to respond to questions, attend progress meetings, and provide documentation for project closeout.

#### **Assumptions:**

- 1. Full time inspection is not required.
- 2. Construction reports will be delivered via email.

#### Deliverables:

1. Construction observation reports

### C. FEE SCHEDULE

BHI will provide the basic services described above on a Lump Sum Fee basis. The project will be invoiced in accordance with the provisions of the Contract between SFC and BHI dated November 24, 2014. Compensation amounts for each scoped task are provided below. Invoicing will be based on percent complete of task or cumulative completion of subtasks associated with the work under the task. Lump Sum amounts shown include all direct costs, overhead, profits, markups, and cost of subcontracted services associated with the task. Time and Materials amounts shown are not-expected-to-exceed (NETE) budgets. All amounts shown are exclusive of New Mexico Gross Receipts Tax.

Task 1: Project Management				
	Lump Sum Amount	\$3,500		
Task 2: Quill Wastewater Treatment Facility Site Survey				
	Lump Sum Amount	\$3,600		
Task 3: Evaluation of Landfilling	Options and Cost			
	Lump Sum Amount	\$1,900		
Task 4: Sampling and Analytical	Testing			
	Lump Sum Amount	\$16,650		
Task 5: Solid Waste Disposal Pl	<u>an</u>			
	Lump Sum Amount	\$7,900		
Task 6: Assistance during Procurement Phase				
	Lump Sum Amount	\$3,700		
Task 7: Project Oversight during Sludge Removal and Disposal				
	Lump Sum Amount	\$1,400		
TOTAL DRO JECT SEE (not inc	I NIMCRT)	¢20 650		
TOTAL PROJECT FEE (not inc	I MINIGRI)	\$38,650		

## D. PROJECT SCHEDULE

Complete Tasks 1 through 5 within 12 weeks of written Notice to Proceed. Complete bidding and construction services in accordance with the County's schedule for bidding the project.

OFFERED	BY:	APPRO\	/ED:
Engineer:	Bohannan Huston, Inc.	Owner	Santa Fe County
Signature:	Digitally signed by Rob Richardson DN: cn-Rob Richardson, on-Bohannan Huston, Inc. on-BH, emalerrichardson, on-Bohannan Huston, Inc. on-BH, emalerrichardsongbhinc com, c=US Date: 2015.05.11.08.20.17-06.00	Signature:	
Name:	Rob Richardson	Name:	
Title	Senior Vice President	Title:	
Date:	May 11, 2015	Date	