



CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 07-FY2019

**RELATIVE TO APPROVAL OF CHANGE ORDER TO THE CONSTRUCTION
MANAGEMENT CONTRACT FOR THE AGAT SANTA RITA WASTEWATER
TREATMENT PLANT UPGRADES**

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities (“CCU”) has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority (“GWA”); and

WHEREAS, the Guam Waterworks Authority (“GWA”) is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA currently has a number of critical Court Order (“CO”) projects including work required at the Agat Santa Rita Wastewater Treatment Plant (WWTP) that is necessary for the plant to achieve compliance with the WWTP’s NDPEs permit, eliminate by-passes at the plant, ensure that solids generated by the WWTP are adequately stabilized and dewatered, and to comply with sludge and biosolids requirements 40 C.F.R. Part 503 as stated in Paragraph 11 of the 2011 Court Order; and

WHEREAS, GWA executed a contract with Sumitomo Mitsui Construction Company (SMCC) to construct the new WWTP by November 1, 2017, and

WHEREAS, GWA executed a contract with GHD, Inc. to provide construction management services as a means towards achieving the Court Order requirements; and

WHEREAS, the original scope and fee for the construction management services estimated an eighteen-month construction period for vertical construction activities that SMCC was contracted to do which resulted in the CM services ending June 8, 2017; and

1 **WHEREAS**, CCU Resolution No. 48-2017 authorized the continuation of CM services
2 from August 15, 2017 through March 31, 2018, after which GWA executed Change Orders 2 and
3 3 in the total amount of One Million Fourteen Thousand Four Hundred Twelve Dollars
4 (\$1,014,412.00); and

5
6 **WHEREAS**, CCU Resolution No. 17-FY2018 authorized the continuation of CM
7 services from April 1, 2018 through August 31, 2018, after which GWA executed Change
8 Orders 4, 5 and 6 in the total amount of Eight Hundred Twenty Thousand Three Hundred Thirty-
9 Two Dollars (\$822,632.00);

10
11 **WHEREAS**, the project Contractor, SMCC, has submitted documentation to GWA
12 management (See Exhibits A and B) wherein they now project the completion of all construction
13 activities will not occur until March 2019 and the reason for this delay is due to additional claims
14 of adverse weather stopping work progress, work force shortages as a result of the H2-B visa
15 program denying work permit renewals and additional work resulting in approved Change
16 Orders; and

17
18 **WHEREAS**, GWA management has reviewed SMCC's delay claims and transmitted a
19 respond letter dated October 29, 2018 (See Exhibit C) in which GWA considered all aspects of
20 SMCC claims and is willing to provide a contract extension but only to August 2018 given that
21 GWA, over the construction period, approved financial measures to SMCC that would have
22 allowed work and schedule to be accelerated thus maintaining a reasoned expectation of the
23 project being completed as planned; and,

24
25 **WHEREAS**, notwithstanding the issues surrounding the contractor delays and a means
26 of allowing for continuity of construction management services as it relates to any construction
27 extension due to contractor issues, GWA requested GHD submit a fee proposal to continue
28 construction management service for which GHD has provided to GWA a Nine Hundred
29 Seventy-Seven Thousand One Hundred Ninety-Seven Dollars (\$977,197.00) fee proposal
30 through April 2019 (See Exhibit D); and

31 //

32 //

1 **WHEREAS**, GWA management will be negotiating down the fee proposal submitted by
2 GHD given the level of staffing and construction activities will ramp down towards the end of
3 the construction period but until final negotiated fees are reached GWA management still seeks
4 CCU approval of additional funding to execute Change Order(s) to a not to exceed the amount of
5 Nine Hundred Seventy-Seven Thousand One Hundred Ninety-Seven Dollars (\$977,197.00) for
6 the extended contract performance period because the timing of any change order approval may
7 not coincide with scheduled CCU meetings; and

8
9 **WHEREAS**, the authorization of the requested funding increase to the Construction
10 Management contract would potentially bring the total value to a not to exceed amount of Six
11 Million One Hundred Thousand Eight Hundred Ten Dollars and Zero Cents (\$6,100,810.00);
12 and

13
14 **WHEREAS**, funding for any Change Order to GHD moving forward will be from any
15 available bond funds under the line item - WW 11-08 "Agat/ Santa Rita STP Replacement",
16 System Development Charge funds and Internally Funded CIP funds as well as Liquidated
17 Damages of \$5,000 per day from the contractor beginning September 1, 2018; and

18
19 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
20 does hereby approve the following:

- 21
22 1. The recitals set forth above hereby constitute the findings of the CCU.
23 2. The CCU hereby approves the funding increase for construction management
24 services to an amount not to exceed Nine Hundred Seventy-Seven Thousand
25 One Hundred Ninety-Seven Dollars (\$977,197.00) (Exhibit D).
26 3. The CCU further approves the total contract value for GHD is an amount not
27 to exceed Six Million One Hundred Thousand Eight Hundred Ten Dollars
28 (\$6,100,810.00).
29 4. The source of funding for any Change Order to GHD moving forward will be
30 from any available bond funds under the line item - WW 11-08 "Agat/ Santa
31 Rita STP Replacement", System Development Charge funds and Internally
32

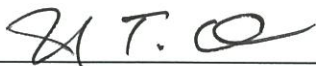
1 Funded CIP funds as well as Liquidated Damages of \$5,000 per day from the
2 contractor beginning September 1, 2018.

3
4 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption
5 of this Resolution.

6
7 **DULY AND REGULARLY ADOPTED**, this 27th day of November 2018.

8
9 Certified by:

Attested by:

10
11 
12 **JOSEPH T. DUENAS**
13 Chairperson

14
15 
16 **J. GEORGE BAMBA**
17 Secretary

18
19 **SECRETARY'S CERTIFICATE**

20 I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as
21 evidenced by my signature above do hereby certify as follows:

22 The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular
23 meeting by the members of the Guam Consolidated Commission on Utilities, duly and
24 legally held at a place properly noticed and advertised at which meeting a quorum was
25 present and the members who were present voted as follows:

26 AYES: _____ 5

27 NAYS: _____ 0

28 ABSTENTIONS: _____ 0

29 ABSENT: _____ 0



EXHIBIT A



SUMITOMO MITSUI CONSTRUCTION CO.,LTD.

GUAM OFFICE: P.O.Box9670 Tamuning, Guam96931, Phone : ++1-671-649-7521 - 24 Fax : ++1-671-649-7550

May 16, 2018

Reference No.: LT-18-020

TO: **Mr. John McArthur Davis, P.E.**
GWA Project Manager
GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building,
688 Route 15, Mangilao, Guam 96913

Thru: **Mr. Bryan J. Ryley**
Construction Manager
GHD, Inc.
865 South Marine Corps, Suite 202,
Guam 96913

PROJECT: IFB-07-ENG-2015
**CONSTRUCTION OF AGAT-SANTA RITA WASTEWATER
TREATMENT PLANT REPLACEMENT; GWA PROJECT NO. S14-002-BND**

SUBJECT: **Request for Project Time Extension**

Dear Mr. Davis,

This is to request project extension with following reason SMCC encountered in implementation of this project.

Due to rejection of H-2B Temporary Alien Skilled workers, we were unable to obtain planned numbers of manpower, which is necessary to acquire to complete the project on time.

As shown in work load analysis sheet, SMCC planned to obtain **126** workers as average and **150** at peak construction duration based on analysis that project require **475,200** man-hours to complete within specified construction period of **660** days (Jan/11/2016 to Nov/1/2017)

※ **126 x 660 x 5/7 x 8 hrs. =475,200** man-hours

On the other hand, due to the H2B issue, we had been facing Island wide shortage of workers from the beginning to date. As a consequence, SMCC could obtain much less work force comparing to the original plan and cumulative total man-hour is **383,560** man-hours at the end of April, 2018. This is the **81%** of planned total man-hours to complete the project and it indicate the current progress percentage is understandable. It is also indicating, we have to spend

181 calendar days to complete the project from May 1st, 2018, which is **October 29, 2018**.

SMCC have been trying all the effort to improve the said workforce shortage based on GWA' s instructions and supports, I believe SMCC attained considerable progress and accelerated the project as achievable as possible.

One of those efforts, SMCC oriented to engage about 645 workers (From April 5, 2016 ~ May 7, 2018) with the following subcontractors:

1. Hyun Hee Construction.
2. JHC Corporation
3. KPL Guam Co., Ltd.
4. FJMAE Builders - General Contractors
5. VRM General Contractor
6. Tonets Corporation DBA TNK Guam/ Guam Advance
7. VG Gozum Construction LLC

Despite those efforts, we could obtain only 70 workers as daily average versus to the original plan of 126 workers.

It is clear that regardless contractor's will and efforts, it is impossible to achieve the project on time due to above described situation, which we consider beyond contractor's control.

Therefore, we are herewith requesting project extension upto **October 29, 2018** based on the above consideration and calculation of necessary working days of 155 days from May 1st, 2018 to complete the project.

Sincerely,

SUMITOMO MITSUI CONSTRUCTION CO.LTD



TAKEYUKI SHIINO
General Manager
Guam Office

Attachments No.1 : Work-load analysis sheet
No.2 : Actual Total man-hours up to April 30, 2018

EXHIBIT B



SUMITOMO MITSUI CONSTRUCTION CO., LTD.

Guam Office : P. O. Box 9670 Tamuning, Guam 96931

Tel: +1-(671) 649-7521~24 Fax: +1-(671) 649-7550

Reference No. : LT-18-045

October 8, 2018

TO: Mr. John McArthur Davis, P.E.
GWA-Project Manager
GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building,
688 Route 15, Mangilao, Guam 96913

Thru: Mr. Bryan J. Ryley
Construction Manager
GHD, Inc.
865 South Marine Corps, Suite 202,
Guam 96913

PROJECT: IFB-07-ENG-2015
CONSTRUCTION OF AGAT-SANTA RITA WASTEWATER
TREATMENT PLANT REPLACEMENT; GWA PROJECT NO. S14-002-BND

SUBJECT: Request for Time Extension (2)

Dear Mr. Davis,

This letter is in continuation of SMCC's letter with Reference No. LT-18-020 dated May 16, 2018.

Since the very beginning of this subject project, SMCC has been trying to expedite all works to meet the time line of the project. On the contrary to such efforts, it did not work out well as our intention because of the island wide worker's shortage due to H2B visa rejection. The situation became worse as a consequence of the heavy demand of construction workforce for military build-up especially after recent awards for the major military projects in Guam and we lost many workforce due to the construction booms in Saipan.

Mr. John McArthur Davis P. E.
October 8, 2018
Page 2

As on-going major structural works in Agat Santa Rita project, Equalization Tank and Maintenance Building are substantially delayed due to the reasons above. Structural sub-contractors are facing more severe shortage of workers comparing before. Please see attached letters (attachment no 1) from sub-contractors.

As we informed in our previous letter, about 9 months delayed from our original schedule due to labor shortage (see attachment 2) and about 6 months delayed due to rain days (approved under CO 4, 8 and 10). And in recent months, invariably daily wet condition at site. Please see attached summary (attachment no. 3) of rain days from April 24th 2018 to September 30th 2018 which is 36 working days.

We also carried out on various additional works under Change Order No. 2 to 11 and to date we did not request time extension for those additional works yet.

We would like to inform other possible cause for further delay due to the time taking approval process as below;

The Change Order on Lighting Arresters and Surge Protection (SMCC Letter No. SMCC/ASWTP-LTR-105 submitted in March 6, 2018 and updated on August 6th, 2018 due to changes in detail plan and Change Order for the Generator at Ga'an (SMCC Letter No. LT-18-029 submitted last June 25, 2018) are still pending approval. We have prepared schedule on these works by expecting approval by October 15, 2018 (see attachment 4)

As a current schedule;
We are scheduling to carry out Asphalt works at highlighted areas (see attachment 5) by December 2018.

The revised schedule summary is attached for your review and approval (attachment 6).

We are hereby requesting time extension up to March 2019 to complete all the item of works except the supply and installation of Generator at Ga'an Pump Station.

Mr. John McArthur Davis P.E.
October 8, 2018
Page 3

And we are also requesting to make this item(supply and installation of Generator at Ga'an Pump Station) as independent agreement to the current contract, so we can close the contract by March, 2019.

We request this because this long lead time item was informed to SMCC recently and still waiting for approval, therefore SMCC do not have sufficient time to complete within the same time limit of other remaining works.

Your consideration and approval on this request will be very much appreciated.

Sincerely,

SUMITOMO MITSUI CONSTRUCTION CO. LTD.



TAKEYUKI SHIRINO
General Manager
Guam Office

ATTACHMENT 1

JHC CORPORATION

Winner Building 20-H Tamuning Guam 96913
P.O.Box 12999 Tamuning Guam 96931-2999

Tel:667-3828
Fax:66-7310

Date : February 25, 2018
To : Mr. Nandagopalan
Project Manager

Project : Agat-Sta. Rita Waste Water Treatment Plant
(Administration Building)

Subject : Project Time Extension


Hafa Adai,

This is to formally request your good office to allow the time extension of completion for the above stated project due to the following reasons:

1. Lack of Manpower
2. Continuous Rain

As per our experience while constructing the recently completed structures, the clarifiers, lack of manpower has already been an issue for us. This is due to the H2B Visa issues as you very well knew. After the cancellation of our request for visa renewal, we cannot anymore attain the completion date as per our sub-contract for the Administration Building. Also, rain weather greatly affects our production. In most instances, rain stopped our works almost in daily routine and production is commensurably affected. With the above, we humbly request to complete the above said structure with an additional 4 months extension up to end of August 2018. We appreciate that SMC is offering more works to carry out structure construction namely Maintenance Building and Equalization Tank but unfortunately due to non-availability of workers, we cannot commit to carry-out any additional works for now. We hope that with your consideration, this request will be granted.

Thank you very much.


CHEN ZHIQIONG MIN Feb. 2018
President DATE



KPL GUAM CO., LTD.
GENERAL CONTRACTOR

Unit 203 Photo Town Plaza
353 Chalan San Antonio
Tamuning, Guam 96913
Phone No.: (671)685-2521

Date : Sept. 25, 2018
To : Mr. Nandagopalan
Project Manager

Project : Agat-Sta Rita Waste Water Treatment Plant (Centrifuge, Aerobic Building and
EQ Tank)

Subject : Manpower Shortage

Sir,

KPL Construction has been very appreciative on the business provided to us with the construction of
Three (3) Concrete structures namely Centrifuge, Aerobic Building and Equalization Tank.

However, with the manpower commitment by KPL on the on-set of these projects, needed to be supplied
for the performance of those building works as previously discussed and sub-contracted, it is evident that
the problem of manpower shortage still persists, despite our efforts to constantly publish an ads for
manpower requirements. There were workers whom we initially hired and tested, but skillfulness were
below standard. This only resulted into delay and repair of works and may continue to happen in the
future if only meeting the number of manpower is required, thus not practicable, quality and money wise.

With the above scenario, we feel that the problem will not be resolved until the government allows the
re-entry of H2B visa workers other than military projects.

We are deeply concern on this issue but we seek your understanding on our initial request to extend the
completion date of the Equalization tank by 2 months (end of December) without weather limitations. As
you may know, weather disturbances had also been prevailing yearlong thus production had been
minimized if not limited.

Nonetheless, we were notified and aware that the completion of the large structure (Equalization Tank)
is critical but please bear with us on this request and rest assured that KPL will continue to try looking for
qualified workers and finish all works in the soonest time possible.

Thank you and best regards,

Vince Carmona III



HYUN HEE CONSTRUCTION CORPORATION

General Contractor Civil Structure Works

P.O. Box 2727 Tamuning, Guam 93961

Tel.: (671) 777-3123

Date : June 07, 2018
To : Mr. Nandagopalan
Project Manager
Project : Agat-Sta.Rita Waste Water Treatment Plant
Subject : Manpower Supply

Sir,

Hyun Hee Construction has been supportive on SMCC's requirements for manpower supply for various trade more than a decade now. In return, SMCC likewise provided the projects from place to place into which Hyun Hee was very grateful of.

However, with H2B visa issues, Guam's limited workers become very demanding for all contractors doing projects, thus competition among contractors to secure workers become competitive as well. Most of our previous workers succumb to this trend and move from contractors to contractors who can give them the most benefits. Almost 45% of our workers are already employed by other contractors not to mention workers that went to Saipan for a better fortune.

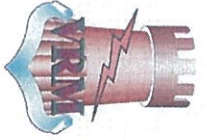
Due to this, despite our pleads and request to stay-on and complete this project, most of them still prefers and choose to leave even leaving their families behind in Guam.

With this problem, we regret that we cannot commit additional workers, other than what we have right now. Rest assured that, with our network/connections on islanders that are with us, we will continue to spread news of our demands for additional workers and support further SMCC's needs.

Hoping for your understanding.

Thank you,


Suk Joong Kim
President



VRM General Contractor
Construction Company

176 Perdon Goro Bortalio Subdivision
Vig'o, Guam 96929
Mailing Address: EMB 1001 1270 North Marine drive
STE 101 Tamuning, Guam 96913
Phone: 671-999-3913 Cell: 671-998-3294

To: Mr. Takiyuki Shino

General Manager
Sumitomo Mitsui Corporation Co. LTD

Sept. 28, 2018

RE: Agat Santa Rita Waste Treatment Plant Replacement
Electrical Works Delayed Due to Insufficient Manpower

Sir,

We regret to inform you that VRM has been having problems with providing workers to complete our works on time. Island wide problem of manpower shortage has been an issue thus haunting us up this time. Most of our trusted guys, permanent and temporary workers previously assigned to this project were pirated by other contractors. I apply for H2B visa just to import dependable and highly skilled electrician to work this project but unfortunately denied.

Nonetheless, with available workers we have now, we still stand committed to complete the project in the soonest.

Sincerely Yours,


Y. Cabinta
VRM General Contractor

ATTACHMENT 2

PROJECT: AGAT-STA.RITA WASTE WATER TREATMENT PLANT

Month	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average	TOTAL	MANHOUR
Apr-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	2.44	5	608
	Unskilled	0	1	0		0	1	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	1	0	3	3	3	3	4			488	
May-16	Skilled	0	5	5	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	5.461538	9	1136
	Unskilled	0	3	3	3	3	3	3	0	3	5	5	6	6	2	0	4	5	5	6	6	4	0	1	3	5	3	3	1	0	0	6	3.730769		776
Jun-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	10.6	16	2192
	Unskilled	6	5	4	0	1	3	5	6	6	6	3	0	6	6	6	6	3	0	4	8	8	9	9	5	0	7	7	8	9		5.84		1216	
Jul-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	17.92	29	3696
	Unskilled	11	9	0	0	7	13	10	12	8	1	10	12	14	13	13	11	0	18	18	15	8	17	8	2	16	11	17	7	8	5	1	11.36		2360
Aug-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	22.77778	34	5048
	Unskilled	8	15	2	0	8	2	0	10	12	9	10	13	7	0	14	14	15	17	17	13	1	13		20	17	15	12		16	19	21	11.55556		2560
Sep-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	33.68	58	6960
	Unskilled	31	28	21	3	13	29	8	33	36	22	7	4	24	28	25	22	14	4	28	26	28	27	29	18	0	24	22	23	25	25	23.84		5016	
Oct-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	46.46154	70	9968
	Unskilled	38	17	35	42	38	44	41	39	16	40	49	48	45	41	21	34	51	49	48	45	36	17	45	47	49	51	49	41	45	45	23.53846		5056	
Nov-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	48.70833	71	9736
	Unskilled	48	49	48	49	42	8	49	50	40	42	20	40	19	40	44	52	51	40	17	51	49	58	5	47	46	19	48	52	49		22.25		4472	
Dec-16	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	51	77	9688
	Unskilled	53	51	48	18	47	49	46	49	45	39	19	44	48	51	46	48	44	9	44	42	45	46	39	31	0	25	41	39	42	38	25	30.8		6304
Jan-17	Skilled	0	29	55	53	55	51	43	19	45	50	42	49	56	49	52	49	52	49	46	23	48	48	47	49	47	34	23	49	59		31.92308	83	10608	
	Unskilled	0	17	32	36	38	40	22	5	37	36	34	41	33	22	5	25	30	31	32	37	15	2	23	31	37	35	39	24	0	35	36			6640
Feb-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	54.95833	89	10944
	Unskilled	49	56	57	45	9	55	56	55	51	49	38	18	43	53	56	42	56	43	64	63	60	67	66	54	21	59	51				34.25		6888	
Mar-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	39.3704	67	8728
	Unskilled	37	42	43	39	33	49	51	44	46	38	37	34	43	48	39	38	35	4	0	29	31	38	40	38	35	9	31	35	34	37	34	28.07407		6240
Apr-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	25	59	7088
	Unskilled	24	10	37	42	42	41	37	21	0	31	35	37	36	5	24	12	40	38	37	41	39	24	7	33	34	36	39	39	28	17	34.48		5176	
May-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	39.30769	68	8472
	Unskilled	37	39	37	41	43	24	0	36	42	40	37	40	29	5	44	38	44	46	43	26	3	41	48	41	41	42	29	0	24	54	45	28.80769		6200
Jun-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	44.24	81	9240
	Unskilled	49	45	24	0	43	42	50	45	52	37	12	51	51	41	40	39	27	0	48	45	51	51	48	33	1	46	50	49	36	49	36.6		7608	
Jul-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	39.36	77	8072
	Unskilled	25	3	46	6	48	48	47	28	9	41	45	48	46	43	32	2	39	45	44	43	4	19	3	41	43	44	47	48	25	4	43	37.56		7680
Aug-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	42.44444	83	9536
	Unskilled	46	44	51	47	33	4	43	40	45	51	47	23	0	46	47	45	51	32	7	47	53	42	46	47	31	2	33	43	47	52	40.18519		9016	
Sep-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	50.58333	89	9680
	Unskilled	55	33	0	0	55	61	62	8	0	0	49	54	51	55	38	0	52	50	58	55	11	55	62	50	48	47	31				42.4		8864	
Oct-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	56.69231	102	11808
	Unskilled	2	55	51	55	42	42	1	55	42	65	53	39	9	52	56	59	57	66	48	15	64	60	64	64	66	55	0	65	65	69	231	45.65385		9536
Nov-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	54.58333	103	10992
	Unskilled	64	64	66	42	9	62	67	61	50	62	33	0	52	56	59	50	39	0	57	55	61	0	47	44	2	54	53	52	55		48.08333		9560	
Dec-17	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	31.16129	64	8096
	Unskilled	47	44	44	43	35	1	34	37	42	36	44	35	0	40	46	42	45	32	5	42	45	43	43	46	35	0	27	45	47		32.83871		8520	
Jan-18	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	68.65385	121	14280
	Unskilled	0	63	66	64	75	62	11	70	69	63	64	73	49	3	63	73	69	73	72	51	17	73	75	63	71	71	51	5	80	71	75	52.15385		10848
Feb-18	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	63.04167	112	12688
	Unskilled	73	71	52	0	72	69	66	63	73	57	9	66	72	72	67	69	44	2	63	71	73	72	66	48	0	63	64	69			48.91667		9848	
Mar-18	Skilled	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25									

ATTACHMENT 3

Summary of Weather Days After April 23, 2018

	Ave Rainfall (inches/day)	Actual Days in Excess of the Ave. Rainfall (From Table 2)
Apr-18	0.12	2.00 days
May-18	0.14	8.00 days
Jun-18	0.24	5.00 days
Jul-18	0.39	4.00 days
Aug-18	0.55	8.00 days
Sep-18	0.47	9.00 days
Subtotal:		36.00 days

2018		Precip. Accum.	MM	INCH		ACTUAL WEEK DAYS ABOVE AVE	Table 2
Apr	Sum	0.5	0.020	04/17/18	Sunday, April 01, 2018	TRUE	2.00
1	0.5 mm	1.3	0.051	04/27/18	Monday, April 02, 2018	0.051	
2	1.3 mm	0	0.039	04/31/18	Tuesday, April 03, 2018	0.039	
3	1 mm	0	0.000	04/4/18	Wednesday, April 04, 2018	0	
4	0 mm	1	0.039	04/5/18	Thursday, April 05, 2018	0.039	
5	1 mm	10.2	0.402	04/6/18	Friday, April 06, 2018	0.402	
6	10.2 mm	0	0.000	04/7/18	Saturday, April 07, 2018	TRUE	1.00
7	0 mm	14	0.551	04/8/18	Sunday, April 08, 2018	TRUE	
8	14 mm	0	0.000	04/9/18	Monday, April 09, 2018	0	
9	0 mm	0	0.000	04/10/18	Tuesday, April 10, 2018	0	
10	0 mm	0	0.000	04/11/18	Wednesday, April 11, 2018	0	
11	0 mm	0	0.000	04/12/18	Thursday, April 12, 2018	0	
12	0 mm	0	0.000	04/13/18	Friday, April 13, 2018	0	
13	0 mm	7.6	0.299	04/14/18	Saturday, April 14, 2018	TRUE	1.00
14	7.6 mm	14	0.382	04/15/18	Sunday, April 15, 2018	TRUE	
15	34.3 mm	4.8	0.189	04/16/18	Monday, April 16, 2018	0.189	Considered in CO
16	4.8 mm	0	0.000	04/17/18	Tuesday, April 17, 2018	0	
17	0 mm	5.6	0.220	04/18/18	Wednesday, April 18, 2018	0.220	Considered in CO
18	5.6 mm	2.3	0.091	04/19/18	Thursday, April 19, 2018	0.091	
19	2.3 mm	0	0.000	04/20/18	Friday, April 20, 2018	0	
20	0 mm	8.4	0.331	04/21/18	Saturday, April 21, 2018	TRUE	1.00
21	8.4 mm	0.8	0.031	04/22/18	Sunday, April 22, 2018	TRUE	
22	0.8 mm	0.8	0.031	04/23/18	Monday, April 23, 2018	0.031	
23	0.8 mm	0	0.000	04/24/18	Tuesday, April 24, 2018	0	
24	0 mm	7.1	0.280	04/25/18	Wednesday, April 25, 2018	0.280	
25	0.8 mm	9.7	0.382	04/27/18	Friday, April 27, 2018	0.382	
26	7.1 mm	18.5	0.728	04/28/18	Saturday, April 28, 2018	TRUE	1.00
27	9.7 mm	2.3	0.091	04/29/18	Sunday, April 29, 2018	TRUE	
28	18.5 mm	1.3	0.051	04/30/18	Monday, April 30, 2018	0.051	
29	2.3 mm						
30	1.3 mm						

2018		Precip. Accum.	MM	INCH		ACTUAL WEEK DAYS ABOVE AVE	Table 2
May	Sum	1.3	0.512	05/1/18	Tuesday, May 01, 2018	0.512	8.00
1	1.3 mm	0	0.000	05/2/18	Wednesday, May 02, 2018	0	
2	0 mm	2.8	0.110	05/3/18	Thursday, May 03, 2018	0.110	
3	2.8 mm	1.3	0.051	05/4/18	Friday, May 04, 2018	0.051	
4	1.3 mm	0	0.000	05/5/18	Saturday, May 05, 2018	TRUE	1.00
5	0 mm	0	0.000	05/6/18	Sunday, May 06, 2018	TRUE	
6	0 mm	0	0.000	05/7/18	Monday, May 07, 2018	0	
7	0 mm	2.3	0.091	05/8/18	Tuesday, May 08, 2018	0.091	
8	2.3 mm	1.3	0.051	05/9/18	Wednesday, May 09, 2018	0.051	
9	1.3 mm	0.3	0.012	05/10/18	Thursday, May 10, 2018	0.012	
10	0.3 mm	6.1	0.240	05/11/18	Friday, May 11, 2018	0.240	1.00
11	6.1 mm	0.3	0.012	05/12/18	Saturday, May 12, 2018	TRUE	1.00
12	0.3 mm	0	0.000	05/13/18	Sunday, May 13, 2018	TRUE	
13	0 mm	9.4	0.370	05/14/18	Monday, May 14, 2018	0.370	1.00
14	9.4 mm	3	0.118	05/15/18	Tuesday, May 15, 2018	0.118	
15	3 mm	18.3	0.720	05/16/18	Wednesday, May 16, 2018	0.720	1.00
16	18.3 mm	2.3	0.091	05/17/18	Thursday, May 17, 2018	0.091	
17	2.3 mm	1.5	0.059	05/18/18	Friday, May 18, 2018	0.051	
18	1.3 mm	1.3	0.051	05/19/18	Saturday, May 19, 2018	TRUE	1.00
19	1.5 mm	1.3	0.051	05/20/18	Sunday, May 20, 2018	TRUE	
20	1.3 mm	20.8	0.819	05/21/18	Monday, May 21, 2018	0.819	1.00
21	20.8 mm	38.6	1.520	05/22/18	Tuesday, May 22, 2018	1.520	1.00
22	38.6 mm	6.6	0.289	05/23/18	Wednesday, May 23, 2018	0.289	1.00
23	6.6 mm	0.3	0.012	05/24/18	Thursday, May 24, 2018	0.012	
24	0.3 mm	0.3	0.012	05/25/18	Friday, May 25, 2018	0.012	
25	0.3 mm	0.8	0.031	05/26/18	Saturday, May 26, 2018	TRUE	1.00
26	0.8 mm	0	0.000	05/27/18	Sunday, May 27, 2018	TRUE	
27	0 mm	2.3	0.091	05/28/18	Monday, May 28, 2018	0.091	
28	2.3 mm	4.1	0.161	05/29/18	Tuesday, May 29, 2018	0.161	1.00
29	4.1 mm	0	0.000	05/30/18	Wednesday, May 30, 2018	0	
30	0 mm	0.000	0.000	05/31/18	Thursday, May 31, 2018	0.000	
31	1.5 mm	1.5	0.059			0.059	

Memorial Day Holiday

2018		Precip. Accum.				ACTUAL WEEK DAYS ABOVE AVE.	
Jun	Sum	MM	INCH				
1	1 mm	1	0.039	06/01/18	0.039	TRUE	-
2	0.3 mm	0	0.012	06/02/18	0	TRUE	-
3	8.9 mm	8.9	0.350	06/03/18	0.351	TRUE	-
4	13.3 mm	13.5	0.531	06/04/18	0.531	TRUE	-
5	43.9 mm	43.9	1.728	06/05/18	1.728	TRUE	1.00
6	0 mm	0	0.000	06/06/18	0	TRUE	-
7	0.8 mm	0.8	0.031	06/07/18	0.031	TRUE	-
8	18 mm	18	0.709	06/08/18	0.709	TRUE	1.00
9	6.3 mm	6.3	0.248	06/09/18	0.248	TRUE	-
10	1.8 mm	1.8	0.071	06/10/18	0.071	TRUE	-
11	7.1 mm	7.1	0.280	06/11/18	0.280	TRUE	1.00
12	1 mm	1	0.039	06/12/18	0.039	TRUE	-
13	0 mm	0	0.000	06/13/18	0	TRUE	-
14	0.3 mm	0	0.012	06/14/18	0	TRUE	-
15	0 mm	0	0.000	06/15/18	0	TRUE	-
16	1 mm	1	0.039	06/16/18	0	TRUE	-
17	0 mm	0	0.000	06/17/18	0	TRUE	-
18	0 mm	0	0.000	06/18/18	0	TRUE	-
19	3 mm	3	0.118	06/19/18	0.118	TRUE	-
20	4.6 mm	4.6	0.181	06/20/18	0.181	TRUE	-
21	5.8 mm	5.8	0.228	06/21/18	0.228	TRUE	-
22	0.5 mm	0.5	0.020	06/22/18	0.020	TRUE	-
23	0.3 mm	0.3	0.012	06/23/18	0	TRUE	-
24	0 mm	0	0.000	06/24/18	0	TRUE	-
25	0 mm	0	0.000	06/25/18	0	TRUE	-
26	6.6 mm	6.6	0.260	06/26/18	0.260	TRUE	1.00
27	19 mm	19	0.748	06/27/18	0.748	TRUE	1.00
28	3.3 mm	3.3	0.130	06/28/18	0.130	TRUE	-
29	0 mm	0	0.000	06/29/18	0	TRUE	-
30	4.1 mm	4.1	0.161	06/30/18	0.161	TRUE	-

Table 2

5.00

2018		Precip. Accum.				ACTUAL WEEK DAYS ABOVE AVE.	
Jul	Sum	MM	INCH				
1	2.5 mm	2.5	0.098	07/01/18	0.098	TRUE	-
2	0.3 mm	0.3	0.012	07/02/18	0.012	TRUE	-
3	4.8 mm	4.8	0.189	07/03/18	0.189	TRUE	-
4	22.1 mm	22.1	0.870	07/04/18	0.870	TRUE	1.00
5	47.5 mm	47.5	1.870	07/05/18	1.870	TRUE	1.00
6	48.7 mm	46.7	1.838	07/06/18	1.838	TRUE	1.00
7	5.6 mm	5.6	0.220	07/07/18	0.220	TRUE	-
8	15.2 mm	15.2	0.598	07/08/18	0.598	TRUE	-
9	0.3 mm	0.3	0.012	07/09/18	0.012	TRUE	-
10	2.3 mm	2.3	0.091	07/10/18	0.091	TRUE	-
11	7.4 mm	7.4	0.291	07/11/18	0.291	TRUE	-
12	10.4 mm	10.4	0.409	07/12/18	0.409	TRUE	1.00
13	7.1 mm	7.1	0.280	07/13/18	0.280	TRUE	-
14	5.1 mm	5.1	0.201	07/14/18	0.201	TRUE	-
15	0.3 mm	0.3	0.012	07/15/18	0.012	TRUE	-
16	13.5 mm	13.5	0.531	07/16/18	0.531	TRUE	1.00
17	2 mm	2	0.079	07/17/18	0.079	TRUE	-
18	0 mm	0	0.000	07/18/18	0	TRUE	-
19	3.8 mm	3.8	0.150	07/19/18	0.150	TRUE	-
20	30.7 mm	30.7	1.209	07/20/18	1.209	TRUE	1.00
21	6.9 mm	6.9	0.269	07/21/18	0.269	TRUE	-
22	7.6 mm	7.6	0.299	07/22/18	0.299	TRUE	-
23	0.8 mm	0.8	0.031	07/23/18	0.031	TRUE	-
24	3 mm	3	0.118	07/24/18	0.118	TRUE	-
25	0 mm	0	0.000	07/25/18	0	TRUE	-
26	7.9 mm	7.9	0.311	07/26/18	0.311	TRUE	-
27	0 mm	0	0.000	07/27/18	0	TRUE	-
28	0.8 mm	0.8	0.031	07/28/18	0.031	TRUE	-
29	4.3 mm	4.3	0.169	07/29/18	0.169	TRUE	-
30	4.1 mm	4.1	0.161	07/30/18	0.161	TRUE	-

Table 2

4.00

Fourth of July Holiday

Liberation Day, Holiday

2018		Precip. Accum.		MM		INCH		ACTUAL WEEK DAYS ABOVE AVE.	
Aug	Sum	MM	INCH						
1	19.6 mm	19.6	0.772	08/1/18	Wednesday, August 01, 2018	0.772	TRUE	1.00	
2	40.1 mm	40.1	1.579	08/2/18	Thursday, August 02, 2018	1.579	TRUE	1.00	
3	5.6 mm	5.6	0.220	08/3/18	Friday, August 03, 2018	0.22	TRUE	1.00	
4	32.8 mm	32.8	1.291	08/4/18	Saturday, August 04, 2018	1.291	TRUE	1.00	
5	3.8 mm	3.8	0.150	08/5/18	Sunday, August 05, 2018	0.150	TRUE	1.00	
6	6.3 mm	6.3	0.248	08/6/18	Monday, August 06, 2018	0.248	TRUE	1.00	
7	0 mm	0	0.000	08/7/18	Tuesday, August 07, 2018	0	TRUE	1.00	
8	0 mm	0	0.000	08/8/18	Wednesday, August 08, 2018	0	TRUE	1.00	
9	7.6 mm	7.6	0.299	08/9/18	Thursday, August 09, 2018	0.299	TRUE	1.00	
10	0 mm	0	0.000	08/10/18	Friday, August 10, 2018	0	TRUE	1.00	
11	0.3 mm	0.3	0.012	08/11/18	Saturday, August 11, 2018	0.012	TRUE	1.00	
12	3.3 mm	3.3	0.130	08/12/18	Sunday, August 12, 2018	0.130	TRUE	1.00	
13	5.8 mm	5.8	0.228	08/13/18	Monday, August 13, 2018	0.228	TRUE	1.00	
14	16.3 mm	16.3	0.642	08/14/18	Tuesday, August 14, 2018	0.642	TRUE	1.00	
15	8.9 mm	8.9	0.350	08/15/18	Wednesday, August 15, 2018	0.35	TRUE	1.00	
16	6.2 mm	6.2	0.241	08/16/18	Thursday, August 16, 2018	0.241	TRUE	1.00	
17	2 mm	2	0.079	08/17/18	Friday, August 17, 2018	0.079	TRUE	1.00	
18	2.8 mm	2.8	0.110	08/18/18	Saturday, August 18, 2018	0.110	TRUE	1.00	
19	50.3 mm	50.3	1.980	08/19/18	Sunday, August 19, 2018	1.980	TRUE	1.00	
20	33.5 mm	33.5	1.319	08/20/18	Monday, August 20, 2018	1.319	TRUE	1.00	
21	83.1 mm	83.1	3.272	08/21/18	Tuesday, August 21, 2018	3.272	TRUE	1.00	
22	1.5 mm	1.5	0.059	08/22/18	Wednesday, August 22, 2018	0.059	TRUE	1.00	
23	4.8 mm	4.8	0.189	08/23/18	Thursday, August 23, 2018	0.189	TRUE	1.00	
24	0 mm	0	0.000	08/24/18	Friday, August 24, 2018	0	TRUE	1.00	
25	0 mm	0	0.000	08/25/18	Saturday, August 25, 2018	0	TRUE	1.00	
26	0 mm	0	0.000	08/26/18	Sunday, August 26, 2018	0	TRUE	1.00	
27	44.2 mm	44.2	1.740	08/27/18	Monday, August 27, 2018	1.74	TRUE	1.00	
28	0.3 mm	0.3	0.012	08/28/18	Tuesday, August 28, 2018	0.012	TRUE	1.00	
29	1.3 mm	1.3	0.051	08/29/18	Wednesday, August 29, 2018	0.051	TRUE	1.00	
30	0.3 mm	0.3	0.012	08/30/18	Thursday, August 30, 2018	0.012	TRUE	1.00	
31	7.1 mm	7.1	0.280	08/31/18	Friday, August 31, 2018	0.28	TRUE	1.00	

Table 2
8.00

2018		Precip. Accum.		MM		INCH		ACTUAL WEEK DAYS ABOVE AVE.	
Sep	Sum	MM	INCH						
1	10.7 mm	10.7	0.421	09/1/18	Saturday, September 01, 2018	0.421	TRUE	1.00	
2	0 mm	0	0.000	09/2/18	Sunday, September 02, 2018	0	TRUE	1.00	
3	1.3 mm	1.3	0.051	09/3/18	Monday, September 03, 2018	0.051	TRUE	1.00	
4	1.3 mm	1.3	0.051	09/4/18	Tuesday, September 04, 2018	0.051	TRUE	1.00	
5	0 mm	0	0.000	09/5/18	Wednesday, September 05, 2018	0	TRUE	1.00	
6	24.4 mm	24.4	0.961	09/6/18	Thursday, September 06, 2018	0.961	TRUE	1.00	
7	2.5 mm	2.5	0.099	09/7/18	Friday, September 07, 2018	0.099	TRUE	1.00	
8	9.4 mm	9.4	0.370	09/8/18	Saturday, September 08, 2018	0.370	TRUE	1.00	
9	0.3 mm	0.3	0.012	09/9/18	Sunday, September 09, 2018	0.012	TRUE	1.00	
10	0.3 mm	0.3	0.012	09/10/18	Monday, September 10, 2018	0.012	TRUE	1.00	
11	12.4 mm	12.4	0.488	09/11/18	Tuesday, September 11, 2018	0.488	TRUE	1.00	
12	0 mm	0	0.000	09/12/18	Wednesday, September 12, 2018	0	TRUE	1.00	
13	32 mm	32	1.260	09/13/18	Thursday, September 13, 2018	1.26	TRUE	1.00	
14	8.9 mm	8.9	0.350	09/14/18	Friday, September 14, 2018	0.35	TRUE	1.00	
15	2.5 mm	2.5	0.099	09/15/18	Saturday, September 15, 2018	0.099	TRUE	1.00	
16	1.3 mm	1.3	0.051	09/16/18	Sunday, September 16, 2018	0.051	TRUE	1.00	
17	10.9 mm	10.9	0.429	09/17/18	Monday, September 17, 2018	0.429	TRUE	1.00	
18	3.3 mm	3.3	0.130	09/18/18	Tuesday, September 18, 2018	0.13	TRUE	1.00	
19	3 mm	3	0.118	09/19/18	Wednesday, September 19, 2018	0.118	TRUE	1.00	
20	3.8 mm	3.8	0.142	09/20/18	Thursday, September 20, 2018	0.142	TRUE	1.00	
21	18 mm	18	0.748	09/21/18	Friday, September 21, 2018	0.748	TRUE	1.00	
22	38.1 mm	38.1	1.500	09/22/18	Saturday, September 22, 2018	1.500	TRUE	1.00	
23	0.5 mm	0.5	0.020	09/23/18	Sunday, September 23, 2018	0.020	TRUE	1.00	
24	0 mm	0	0.000	09/24/18	Monday, September 24, 2018	0	TRUE	1.00	
25	33.8 mm	33.8	1.331	09/25/18	Tuesday, September 25, 2018	1.331	TRUE	1.00	
26	0 mm	0	0.000	09/26/18	Wednesday, September 26, 2018	0	TRUE	1.00	
27	25.7 mm	25.7	1.012	09/27/18	Thursday, September 27, 2018	1.012	TRUE	1.00	
28	0 mm	0	0.000	09/28/18	Friday, September 28, 2018	0	TRUE	1.00	
29	0 mm	0	0.000	09/29/18	Saturday, September 29, 2018	0	TRUE	1.00	

Table 2
9.00

Lab Day Holiday

Typhoon Manglut
Typhoon Manglut
Recovery - Typhoon Manglut

ATTACHMENT 4

ID	Task Name	Start	Finish	October 2018							November 2018							December 2018							January 2019							February 2019							March 2019						
				29	1	4	9	14	19	24	29	3	8	13	18	23	28	3	8	13	18	23	28	2	7	12	17	22	27	1	6	11	16	21	26	3									
1220	Lightning Protection and Surge Protection	Tue 10/2/18	Wed 2/27/19																																										
1221	Submission and Approval	Tue 10/2/18	Wed 10/17/18	2																																									
1222	Shop Drawing and Approval	Thu 10/18/18	Thu 11/15/18	10/18																																									
1223	Procurement and Delivery	Thu 10/25/18	Wed 12/26/18	10/25																																									
1224	Installation:	Thu 11/15/18	Wed 2/27/19																																										
1225	Tipalao	Thu 11/15/18	Tue 2/19/19	11/15																																									
1226	UV	Thu 11/22/18	Wed 2/27/19	11/22																																									
1227	Head Works	Thu 12/27/18	Fri 2/1/19	12/27																																									
1228	Gaan PUMP STATION	Thu 12/27/18	Mon 2/18/19	12/27																																									

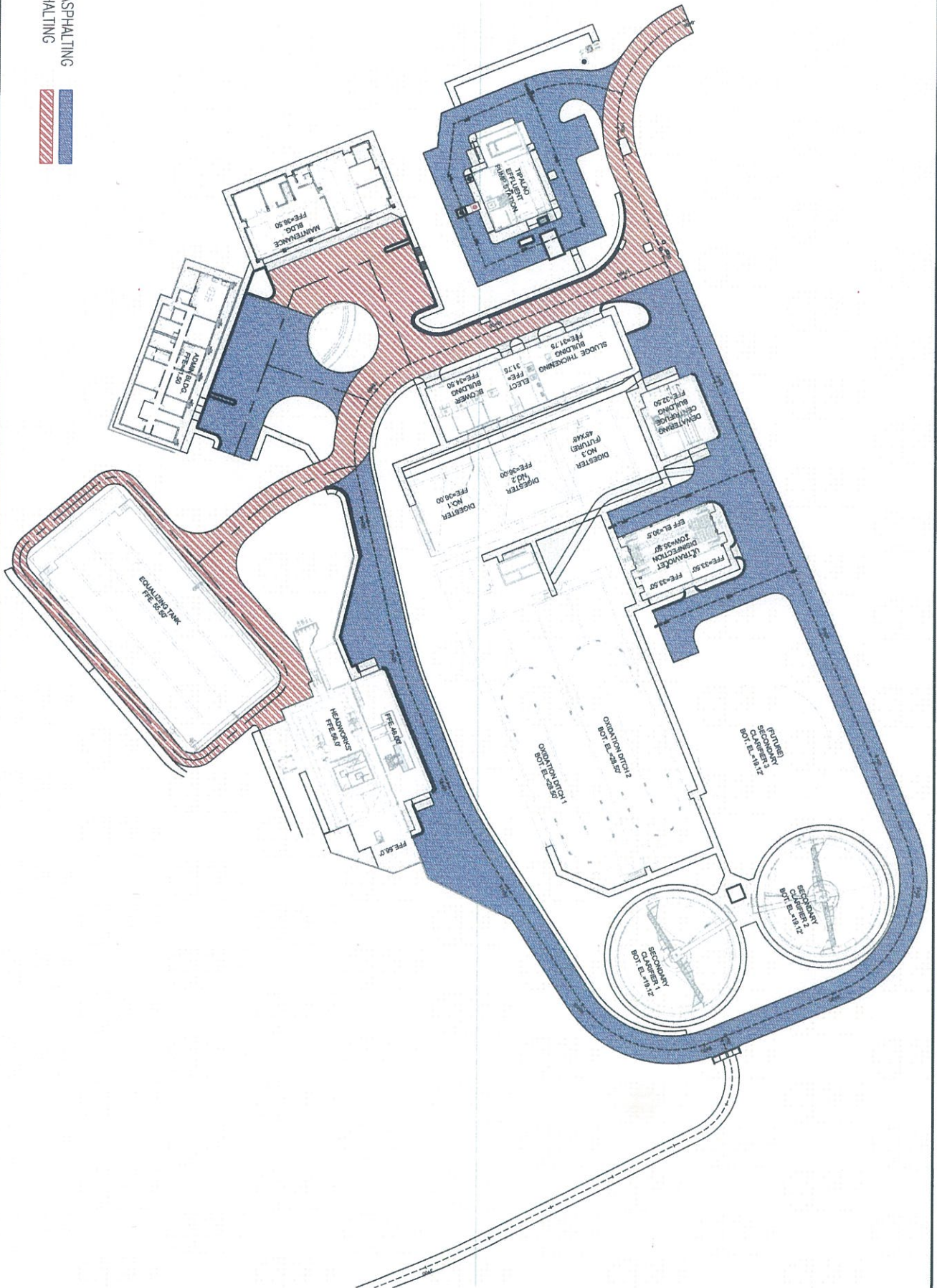
ID	Task Name	Duration	Start	Finish	Calendar (Half 2, 2018 to Half 2, 2019)											
1	SUPPLY AND INSTALL NEW GENERATOR AT GAAN PUMP STATION	303 days	Tue 6/19/18	Thu 8/15/19	[Gantt bar from 6/19/18 to 8/15/19]											
2	CCR Submission and Approval	84 days	Tue 6/19/18	Fri 10/12/18	[Gantt bar from 6/19/18 to 10/12/18]											
3	Manufacture of Generator / ATS	165 days	Mon 10/15/18	Fri 5/31/19	[Gantt bar from 10/15/18 to 5/31/19]											
4	Delivery	30 days	Mon 6/3/19	Fri 7/12/19	[Gantt bar from 6/3/19 to 7/12/19]											
5	Installation and Activation	24 days	Mon 7/15/19	Thu 8/15/19	[Gantt bar from 7/15/19 to 8/15/19]											

Project: Supply and Install New Generator Date: Mon 10/1/18	Task		External Tasks		Duration-only		External Tasks	
	Split		External Milestone		Manual Summary Rollup		External Milestone	
	Milestone		Inactive Milestone		Manual Summary		Progress	
	Summary		Inactive Summary		Start-only		Deadline	
	Project Summary		Manual Task		Finish-only			

Page 1

ATTACHMENT 5

LEGEND:
 DECEMBER 2018 ASPHALTING
 MARCH 2019 ASPHALTING



ATTACHMENT 6

ID	Activity / Task Name	% Complete	Start	Finish	Baseline Start	Baseline Finish
1	Project Summary	95%	Thu 12/01/16	Fr 6/25/18	Thu 12/01/16	Fr 6/25/18
2	Pre-construction Submittals	100%	Mon 2/15/16	Thu 8/8/16	Mon 2/15/16	Thu 8/8/16
3	Pre-construction Submittals Review	100%	Mon 2/15/16	Thu 8/8/16	Mon 2/15/16	Thu 8/8/16
31	Submittal Procurement	100%	Mon 11/1/16	Mon 3/27/17	Mon 11/1/16	Mon 3/27/17
48	Project Management	100%	Mon 3/7/16	Thu 1/20/17	Mon 3/7/16	Thu 1/20/17
140	Project Management and Coordination	100%	Fr 1/8/16	Thu 4/25/16	Fr 1/8/16	Thu 4/25/16
141	Start and process	100%	Thu 1/28/16	Thu 1/28/16	Thu 1/28/16	Thu 1/28/16
142	Construction Phase 1	100%	Thu 1/28/16	Thu 1/28/16	Thu 1/28/16	Thu 1/28/16
143	Process 4 Oxidation Ditch	100%	Mon 4/25/16	Thu 7/5/16	Mon 4/25/16	Thu 7/5/16
144	Process 5 Secondary Clarifier - P1	100%	Thu 5/26/16	Wed 4/25/16	Thu 5/26/16	Wed 4/25/16
315	Clarifier 1	100%	Thu 5/26/16	Wed 4/25/16	Thu 5/26/16	Wed 4/25/16
316	Scum Pump Station	100%	Fr 11/25/16	Mon 7/19/17	Fr 11/25/16	Mon 7/19/17
317	Clarifier 1 System Testing	100%	Fr 2/24/17	Mon 2/27/17	Fr 2/24/17	Mon 2/27/17
320	Process 7 UV Disinfection	100%	Thu 1/28/16	Fr 4/27/16	Thu 1/28/16	Fr 4/27/16
488	Process 8 Effluent Pump station (Tropical) - P1	100%	Mon 7/25/16	Fr 6/15/18	Mon 7/25/16	Fr 6/15/18
489	Process 9 RAS/WAS System (Tropical)	100%	Sat 10/15/16	Tue 3/13/18	Sat 10/15/16	Tue 3/13/18
490	Process Yard Piping (P1)	100%	Sat 6/13/16	Tue 2/28/17	Sat 6/13/16	Tue 2/28/17
491	Site Electrical P1	100%	Mon 10/24/16	Fr 3/24/17	Mon 10/24/16	Fr 3/24/17
492	Phase 1 System Activation	100%	Thu 3/9/17	Wed 3/15/17	Thu 3/9/17	Wed 3/15/17
493	Change Order 1	100%	Tue 8/23/16	Fr 12/23/16	Tue 8/23/16	Fr 12/23/16
510	Relocate Temporary Office	85%	Mon 7/11/16	Fr 3/22/17	Mon 7/11/16	Fr 3/22/17
511	Process 1 Gain Pump Station	85%	Thu 3/16/17	Mon 11/28/18	Thu 3/16/17	Mon 11/28/18
512	Process 2 Headworks	85%	Fr 4/20/17	Sat 11/10/18	Fr 4/20/17	Sat 11/10/18
513	Process 3 Equalization Tank	61%	Fr 3/10/17	Fr 2/22/19	Fr 3/10/17	Fr 2/22/19
514	Process 4 Oxidation ditch (P2)	100%	Mon 7/11/16	Tue 8/4/18	Mon 7/11/16	Tue 8/4/18
515	Process 5 Secondary Clarifier - P2	100%	Tue 11/1/16	Tue 8/28/18	Tue 11/1/16	Tue 8/28/18
516	Process 6 Effluent Pump Station (Tropical) - P2	88%	Fr 3/24/17	Mon 11/12/18	Fr 3/24/17	Mon 11/12/18
517	Process 8 RAS/WAS System (Tropical)	88%	Mon 11/22/16	Mon 11/22/18	Mon 11/22/16	Mon 11/22/18
518	Process 9 Anaerobic Digester	99%	Tue 2/28/17	Wed 10/23/18	Tue 2/28/17	Wed 10/23/18
519	Digester Tank	99%	Tue 2/28/17	Wed 10/23/18	Tue 2/28/17	Wed 10/23/18
520	Anaerobic Digester	99%	Mon 6/13/17	Wed 10/23/18	Mon 6/13/17	Wed 10/23/18
521	Anaerobic Digester	100%	Tue 8/23/16	Tue 8/23/18	Tue 8/23/16	Tue 8/23/18
522	Process 11 Dewatering Centrifuge Bldg	100%	Mon 6/6/17	Fr 8/28/18	Mon 6/6/17	Fr 8/28/18
523	Process 12 Head Works System	100%	Mon 4/10/17	Fr 8/21/18	Mon 4/10/17	Fr 8/21/18
524	Process 13 Plant Water system (P2) - Headworks	100%	Wed 8/23/17	Tue 8/11/18	Wed 8/23/17	Tue 8/11/18
525	Process 14 On-site sewer system and collection lines	100%	Fr 6/9/17	Mon 8/13/18	Fr 6/9/17	Mon 8/13/18
526	Process 15 Admin Bldg	100%	Fr 6/9/17	Tue 4/10/18	Fr 6/9/17	Tue 4/10/18
527	Process 16 Maintenance Bldg	85%	Tue 4/26/17	Mon 8/13/18	Tue 4/26/17	Mon 8/13/18
528	Process Yard Piping (P2)	85%	Mon 7/11/17	Thu 11/7/18	Mon 7/11/17	Thu 11/7/18
529	On-site weathering C Lower Agent to new WWTP Sta	95%	Mon 7/11/16	Fr 10/23/18	Mon 7/11/16	Fr 10/23/18

Station 4 updated Oct. 31, 2017
 Station 4 updated Oct. 31, 2017
 Task Completed
 Milestone Summary
 Project Summary
 Critical Path
 Manual Progress

ID	Activity	Task Name	% Complete	Start	Finish	Duration	Baseline Start	Baseline Finish	Baseline Duration	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1391	Off-site Waterline B. Hydrant to new WWTP	Off-site Waterline B. Hydrant to new WWTP	100%	Thu 9/18/18	Thu 9/21/18	633 days	Thu 9/28/18	Wed 3/28/19														
1373	Site Relining walls	Site Relining walls	100%	Thu 10/21/17	Thu 7/31/18	229 days	Thu 10/21/17	Thu 3/29/18														
1368	(B16) AVF Replacement	(B16) AVF Replacement	100%	Wed 2/11/17	Fri 3/24/17	46 days	Wed 2/11/17	Fri 3/24/17														
1400	Scale System	Scale System	97%	Mon 6/11/18	Wed 11/14/18	135 days	Sat 3/4/17	Wed 3/28/18														
1410	Site electrical P2	Site electrical P2	91%	Tue 6/6/17	Fri 11/16/18	464 days	Tue 6/6/17	Tue 1/30/18														
1419	(B20) Standby Generator	(B20) Standby Generator	100%	Sat 11/4/17	Tue 8/21/18	267.6 days	Sat 11/4/17	Tue 1/2/18														
1421	Phase 2 System Activation Priority	Phase 2 System Activation Priority	100%	Sat 3/4/17	Wed 8/8/18	447.75 days	Sat 3/4/17	Wed 3/28/18														
1422	Testing & Commissioning Phase 2 (Priority)	Testing & Commissioning Phase 2 (Priority)	100%	Sat 3/4/17	Wed 8/8/18	447.75 days	Sat 3/4/17	Wed 3/28/18														
1423	Process 4 Oxidation PSA	Process 4 Oxidation PSA	100%	Mon 9/25/17	Wed 9/27/17	3 days	Mon 9/25/17	Wed 9/27/17														
1424	Process 5 Secondary Clarifiers PSA	Process 5 Secondary Clarifiers PSA	100%	Tue 9/12/17	Thu 9/14/17	3 days	Tue 9/12/17	Thu 9/14/17														
1425	Process 7 UltraViolet Disinfection PSA	Process 7 UltraViolet Disinfection PSA	100%	Sat 3/4/17	Tue 3/7/17	3 days	Sat 3/4/17	Tue 3/7/17														
1426	Process 8 Tripole Pump Station PSA	Process 8 Tripole Pump Station PSA	100%	Sat 1/27/18	Thu 4/12/18	3 days	Sat 1/27/18	Wed 1/23/18														
1427	Process 10 Aerobic Digester PSA	Process 10 Aerobic Digester PSA	100%	Tue 5/1/18	Fri 7/27/18	2 days	Mon 3/26/18	Wed 3/28/18														
1428	Process 11 Dewatering Centrifuge PSA	Process 11 Dewatering Centrifuge PSA	100%	Tue 5/1/18	Wed 7/18/18	2 days	Sat 3/10/18	Tue 3/13/18														
1429	Process 13 Plant Water System PSA	Process 13 Plant Water System PSA	100%	Tue 6/19/18	Wed 8/20/18	2 days	Mon 3/26/18	Wed 3/28/18														
1430	Process 14 On-site sewer collection & Lift Station PSA	Process 14 On-site sewer collection & Lift Station PSA	100%	Mon 6/19/18	Mon 6/18/18	1 day	Wed 2/28/18	Fri 3/2/18														
1431	Process 15 Admin Building PSA	Process 15 Admin Building PSA	100%	Wed 5/30/18	Wed 8/9/18	3 days	Tue 3/13/18	Fri 3/16/18														
1441	Phase 2 System Testing Priority	Phase 2 System Testing Priority	100%	Mon 6/6/18	Wed 8/8/18	2 days	Mon 3/26/18	Wed 3/28/18														
1442	Phase 2 Operation Priority	Phase 2 Operation Priority	100%	Mon 6/6/18	Wed 8/8/18	2 days	Mon 3/26/18	Wed 3/28/18														
1443	Phase 2 System Activation Non Priority	Phase 2 System Activation Non Priority	44%	Thu 6/7/18	Tue 10/23/18	186.5 days	Wed 4/11/18	Fri 8/24/18														
1444	Testing & Commissioning Phase 2 (Non-Priority)	Testing & Commissioning Phase 2 (Non-Priority)	44%	Thu 6/7/18	Tue 10/23/18	186.5 days	Wed 4/11/18	Fri 8/24/18														
1445	Process 1 Clean PS PSA	Process 1 Clean PS PSA	0%	Mon 11/20/18	Mon 11/20/18	0 days	Fri 9/25/18	Fri 9/25/18														
1446	Process 2 Headworks PSA	Process 2 Headworks PSA	100%	Thu 6/7/18	Thu 6/21/18	9 days	Wed 4/11/18	Sat 4/14/18														
1447	Process 3 Equalization Tank PSA	Process 3 Equalization Tank PSA	0%	Thu 11/7/18	Tue 1/22/19	5 days	Mon 5/7/18	Fri 5/11/18														
1448	Process 12 Drainage Piping PSA	Process 12 Drainage Piping PSA	100%	Thu 6/7/18	Mon 6/11/18	3 days	Fri 5/11/18	Tue 5/15/18														
1449	Process 16 Maintenance Building PSA	Process 16 Maintenance Building PSA	0%	Sat 11/2/19	Thu 11/7/19	5 days	Fri 5/11/18	Wed 5/15/18														
1450	Phase 2 System Testing Non Priority	Phase 2 System Testing Non Priority	0%	Thu 11/7/18	Tue 1/22/19	5 days	Sat 5/18/18	Fri 5/25/18														
1451	Phase 2 Operation Non-Priority	Phase 2 Operation Non-Priority	0%	Tue 1/22/19	Tue 1/22/19	0 days	Fri 5/25/18	Fri 5/25/18														
1452	Supply to GWA	Supply to GWA	100%	Tue 11/7/17	Fri 2/8/18	134 days	Tue 11/7/17	Fri 3/9/18														
1453	Site Grading and drainage	Site Grading and drainage	45%	Fri 6/15/18	Tue 1/22/19	187 days	Mon 3/26/18	Wed 6/28/18														
1454	Perimeter fence line	Perimeter fence line	0%	Fri 11/11/18	Tue 1/22/19	10 days	Wed 3/7/18	Tue 4/10/18														
1455	Access road, guard rails and pavement	Access road, guard rails and pavement	55%	Tue 6/6/18	Sat 31/6/18	246 days	Sat 11/4/17	Wed 9/23/18														
1456	Project Close-out Inspection and Turn-over	Project Close-out Inspection and Turn-over	62%	Sat 8/20/18	Fri 3/22/19	228 days	Tue 3/13/18	Wed 8/29/18														
147	Preliminary Inspection	Preliminary Inspection	0%	Mon 3/11/19	Wed 3/13/19	3 days	Sat 5/5/18	Tue 5/8/18														
1478	Punchlist Correction	Punchlist Correction	0%	Thu 3/14/19	Fri 3/22/19	8 days	Wed 5/9/18	Thu 5/24/18														
1479	Final Inspection	Final Inspection	0%	Thu 3/21/19	Fri 3/22/19	2 days	Tue 5/22/18	Thu 5/24/18														
1480	Operation manual, documents As-built, etc.	Operation manual, documents As-built, etc.	100%	Sat 6/30/18	Wed 8/8/18	14 days	Tue 3/13/18	Wed 3/28/18														
1481	Operation Train/Handover	Operation Train/Handover	100%	Sat 8/20/18	Wed 8/9/18	14 days	Tue 3/13/18	Wed 3/28/18														
1482	Clean-up/Demobilization	Clean-up/Demobilization	0%	Wed 1/23/19	Sat 1/26/19	4 days	Fri 9/25/18	Wed 9/20/18														
1483	Project System Completion/Handover-PRIORITY	Project System Completion/Handover-PRIORITY	100%	Wed 8/8/18	Wed 8/8/18	0 days	Wed 3/28/18	Wed 3/28/18														
1484	Project System Completion/Handover- NON-PRIORITY	Project System Completion/Handover- NON-PRIORITY	0%	Tue 1/22/19	Tue 1/22/19	0 days	Fri 5/25/18	Fri 5/25/18														
1485	Extended warranties	Extended warranties	100%	Tue 11/2/16	Tue 9/25/18	837 days	Tue 11/2/16	Tue 11/2/16														
1487	Force Account	Force Account	100%	Tue 11/2/16	Tue 11/2/16	1 day	Tue 11/2/16	Tue 11/2/16														
1488	Project Highlight	Project Highlight	100%	Mon 11/11/18	Tue 8/7/18	88 days	Mon 11/11/18	Fri 5/11/18														

0 100% Milestone Summary Critical Project Summary Manual Progress Station
 Legend: Milestone Summary Critical Project Summary Manual Progress Station
 Baseline & updated Oct. 31, 2017
 Baseline & updated Oct. 31, 2017
 Task Completed
 Task Summary
 Manual Progress



GUAM WATERWORKS AUTHORITY

“Better Water. Better Lives.”

Gloria B. Nelson Public Service Building | 688 Route 15, Mangilao, Guam 96913
P.O. Box 3010, Hagatna, Guam 96932
Tel. No. (671) 300-6846 Fax. No. (671) 648-3290

October 29, 2018

Mr. Takeyuki Shiino
General Manager
Sumitomo Mitsui Construction Co., Ltd. (Guam Office)
P.O. Box 9670
Tamuning, Guam 96931

Reference: GWA Project No. S14-002-BND; Construction of Agat-Santa Rita Wastewater Treatment Plant Replacement

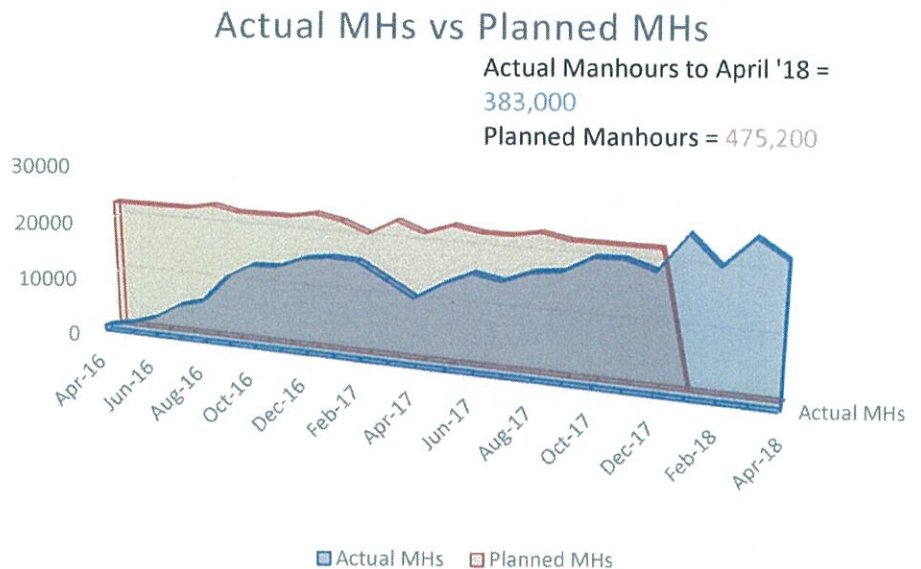
Subject: SMCC Letter LT-18-020, Request for Project Time Extension

Dear Mr. Shiino:

GWA is very aware of the issues SMCC has faced with regard to labor on this important project. In fact, GWA has been very proactive in working with all members of the Project Team - including SMCC, the Engineer of Record, and the Construction Manager – to provide flexibility in construction methods, additional equipment and materials, and additional resources for premium on labor costs to attract and retain additional labor SMCC needed to help us meet our Court Order deadlines.

While we appreciate the information SMCC has presented to support the request for a schedule extension due to the lack of H-2B labor, GWA feels that it is insufficient to support the request. Specifically, we note the following:

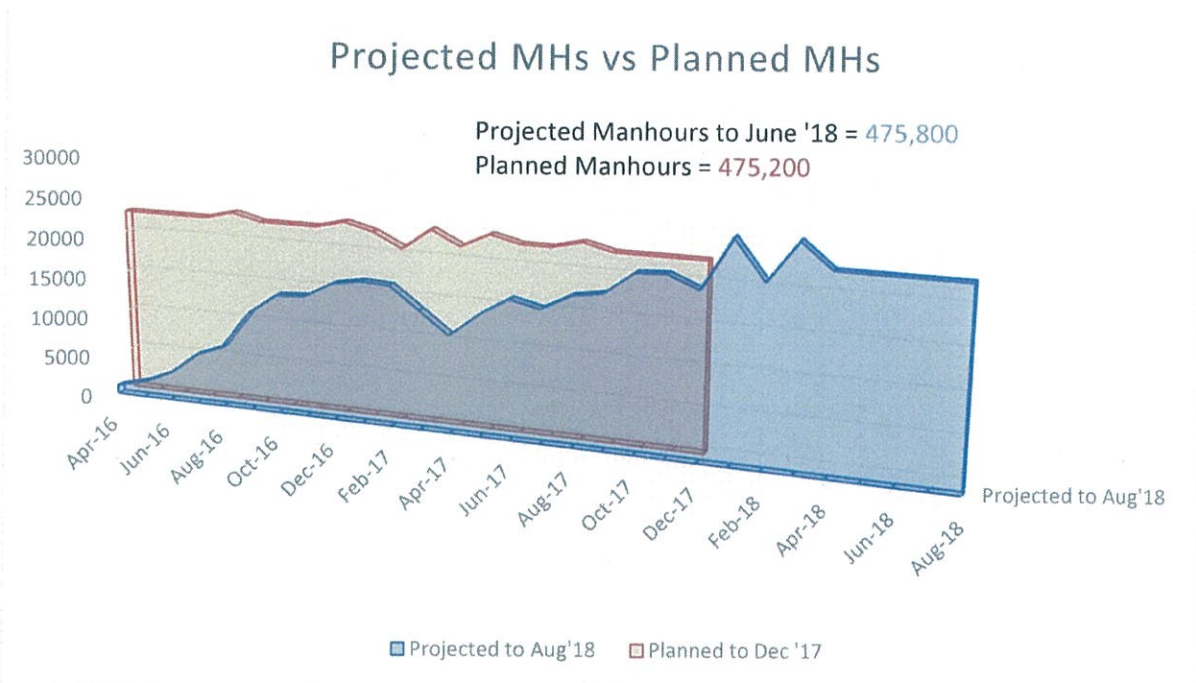
- The information provided indicates a planned manpower level of 126 laborers for the full duration of the original contract completion period as the basis for the total



manpower effort of 475,200 manhours. This ignores the reality on any construction project that requires scaling up the activities on the site at the beginning of the project, and ramping down the activities as the major elements of work are completed.

- The actual manhours presented through April 2018 appear to be based on the number of laborers on site, for the number of work days in a given month working an 8-hour shift. This does not seem to reflect the approach actually taken during construction, for longer shifts and extended work hours in order to recover schedule (GWA did in fact authorize and allocate additional funding for such activity). Therefore, the actual manhours may be understated in SMCC's analysis.
- SMCC is using a past average of total laborers (74) available to project the additional time required to complete the project, which was less than the number of actual laborers employed at the project when the request for time extension was made. This ignores what GWA believes should be the focus for SMCC, which is maintaining the 110+ laborers on the project in April 2018 through the end of the project period in order to minimize any further delay.

GWA believes a more realistic analysis of manhours is needed to support a reasonable request for time extension due to the labor issues facing SMCC. The graphic below is based on more reasonable assumptions for maintaining a labor force SMCC already achieved (110+) and driving for completion to minimize schedule delays.



Notwithstanding the conservative assumptions that SMCC has used with regard to scale-up and ramp-down, and an 8-hour work day, GWA's analysis and projection supports a reasonable time extension through August of 2018. The fact that we are already in October, and SMCC has not yet completed major elements of the work required for substantial completion is of critical concern to both GWA Management and Governance, and to the U.S. Environmental Protection Agency (USEPA), which continues to threaten GWA with additional action under the Court Order.

GWA is willing to provide a contract extension in accordance with our analysis above. However, we intend to assess liquidated damages beginning September 1, 2018 as set forth in the Contract. In the event the project is not completed before the end of the year, the liquidated damages assessed are projected to be approximately \$480,000. GWA requires SMCC to immediately submit a revised schedule showing completion as soon as possible within the calendar year, along with a narrative plan on how SMCC intends to change its approach to make this happen.

I would like to meet with you on Monday, November 5th at 2:00pm at which time SMCC will be expected to provide the revised schedule and explain the plan for achieving the required completion.

Regards,



MIGUEL C. BORDALLO, P.E.
General Manager

Cc: T. Cruz (GWA)
J. Davis (GWA)
K. Clark (GWA)



EXHIBIT D

Date: October 03, 2018

To: Mr. John Davis, P.E., Project Manager
Guam Waterworks Authority
Gloria B. Nelson Public Utilities Complex
Route 15, Mangilao, Guam

Project: Agat-Santa Rita WWTP Replacement Project - Phase II
Project No. S14-002-BND

Subject: MOD 07 – Additional Construction Management Services Scope of Work & Fee Proposal

Dear Mr. Davis:

We are pleased to submit the following proposal for additional CM support services as described below.

SCOPE OF WORK:

In follow-up to your email dated September 20, 2018 (Exhibit 01), we have prepared a cost estimate to extend our Construction Management (CM) Services from **September 01, 2018 through April 30, 2019** as requested.

MOD 05 provided CM services through August 31, 2018. Based on the Contractor's most current progress schedule (Exhibit 02), the "**Project Closeout/ Inspection and Turnover**" is currently being shown as completed by **November 07, 2018**. It is our opinion that this completion date is inaccurate, and we believe the work will not be completed until March or April of 2019. We base this projection on our observation of the on-site progress, the overall project completion percentage, the monthly average percent complete, and that no single structure has been 100% completed and accepted by GWA as of the date of this letter.

Kindly reference Exhibit 03. The graph begins in August 2016 when we received the Contractor's first payment application, and we were able to calculate the first percent of work complete. From NTP to July 31, 2018 the Contractor completed, on average, 3.42% of the total work per month. Over the six (6) month period of February 1, 2018 to July 31, 2018 the contractor completed, on average, 3.16% of the total work per month. Assuming they will complete the same amount of work (3.16% to 3.42% each month), we project the completion of construction (substantial completion) by January 31, 2019 (6 months from July 31, 2018). Additionally, we estimate two (2) to three (3) months for punch list work and project closeout. This would push the Contractor's Overall Project Completion Date to April 30, 2019.

Additionally, the onsite labor force seems to have been in a general decline for the last seven (7) months. The average site staffing for July and August 2018 was 90 persons. Please review Exhibit 04 to see this decline which appears to have begun in February or March of 2018.

MOD 06 was prepared to provide additional CM services for the proposed 21-inch Baza Gardens Sanitary Sewer extension from Route 2A to the new ASRWWTP lift station. It is our understanding that these CM services will be provided by others and the associated fee will be utilized for additional CM services for this project.

MOD 07 has been prepared to establish a budgetary amount of anticipated monthly costs for each month the Contractor is unable to complete their work past August 31, 2018. Our proposal assumes a reduction in staffing as requested by John M. Davis, as described below, and as graphically presented in Table 01.

- We have assumed our current effort for September 2018 through October 2018.
- We have reduced the PM effort from 100% to 75% and the Civil Inspector, RFI & Submittal Manager from 100% to 50% for November 2018 through January 2019.
- We have reduced the PM effort from 75% to 50% and the Civil Inspector, RFI & Submittal Manager from 50% to 25%, and the Sr. Special Inspector from 15% to 0% for February 2019 through April 2019.

TABLE 01- SUMMARY OF MOD 07 STAFFING EFFORT

Working Days Per Month	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
	22	23	22	21	23	20	21	22
Description/Labor Class								
Project Manager	100%	100%	75%	75%	75%	50%	50%	25%
Asst. Project Manager	100%	100%	100%	100%	100%	100%	100%	100%
Structural/Senior Special Inspector	15%	15%	15%	10%	5%	0%	0%	0%
Civil Inspector, RFI & Submittal Manager	100%	100%	50%	50%	50%	25%	25%	25%
Civil Inspector/Structural	100%	100%	100%	100%	100%	100%	100%	100%
Technical Administrative Support	100%	100%	100%	100%	100%	100%	100%	100%

Our estimate has been prepared in good faith, based on our current understanding of the remaining work, and for budgetary purposes only. As GWA is aware, the Contractor has not been able to provide an accurate recovery schedule or achieve projected completion milestones. Our actual effort is entirely dependent on the Contractor's ability to complete (or not complete) their work within the durations and timeframes represented in their schedule.

We have been providing our services on a time and materials (T&M) basis since April of 2018. It is our hope that the Contractor can finish this project in its entirety prior to the end of the year. However, as our current services are being provided on a T&M basis, we believe it is in GWA's best interest for GHD to provide a realistic "quantity of magnitude" with regard to what we believe the appropriate staffing, quality assurance costs, and related expenses will be, should project completion continue to extend.

TABLE 02. SUMMARY OF MOD 07 ESTIMATED COST
(September 01, 2018 through April 30, 2019)

Description/Labor Class	Labor Hours	Estimated Labor Cost	GRT	Amount
Project Manager	992	\$ 217,119.04	\$ 9,047.35	\$ 226,166
Assistant PM	1376	\$ 134,737.92	\$ 5,614.53	\$ 140,352
Structural/Sr. Special Inspector	113	\$ 18,504.80	\$ 771.10	\$ 19,276
Civil Inspector, RFI & Submittal Manager	734	\$ 71,873.28	\$ 2,994.96	\$ 74,868
Civil/Special Inspector	1376	\$ 127,183.68	\$ 5,299.74	\$ 132,483
Technical Administrative Support	1376	\$ 114,042.88	\$ 4,752.17	\$ 118,795
Consumables				\$ 108,056
Subconsultants				\$ 125,600
Quality Assurance				\$ 31,600
TOTAL				\$ 977,197

CLARIFICATIONS AND ASSUMPTIONS:

1. The T&M hourly rates used for our staffing positions are based on those established by Miguel C. Bordallo as reasonable and memorialized in email of July 19, 2018 from Tom Cruz (Exhibit 05). The attachment includes the spreadsheet prepared by Bordallo to establish these rates. We have provided a summary table of those rates to simplify review of this proposal and provide a single source document for future reference and review. (Exhibit 06)
2. In an effort to be completely transparent with GWA, a Detailed Spreadsheet has been provided in Exhibit 07, showing positions, rates, and hours carried in this estimate.
3. The estimated subconsultant services, quality assurance, and consumables associated with our monthly effort have been presented in Exhibit 08. The cost for these expenses is based on the costs incurred for the month of August 2018. Actual costs for consumables, reproduction, telephone & data, motor vehicles, subconsultants, and quality assurance will be provided on a T&M basis with appropriate supporting documentation as requested by Miguel C. Bordallo per email dated August 15, 2018 (Exhibit 09). GHD's corporate "**2018 Fee Schedule**" and "**Chargeout List for Reproduction Supplies**" may also be used in the event that receipts are not readily available. (Exhibit 10).
4. The CM's staffing shall generally consist of those positions shown in Table 01 & 02. The staffing effort shall be managed as an overall budget to allow appropriate flexibility for CM staffing to ramp up and down based on specific work activities that are in progress or work that has been completed. The CM shall coordinate the staffing based on the requirements for a particular day, week, or month.
5. The budget provided for anticipated quality assurance survey verification, compaction testing, concrete strength testing, and material testing assumes these services will be required through the end of the project. These costs will not be invoiced if they are not incurred. We anticipate these costs will not be exceeded.

6. The Contractor shall pay for overtime inspection services required or requested outside of the normal 40 hour work week. This requirement shall be strictly enforced and supported by GWA with payment being deducted from the Contractor's Progress Payment Applications as appropriate. This amount will then be distributed to GHD by GWA change order or by other acceptable terms to GHD and GWA.
7. GWA agrees to negotiate with GHD regarding change orders for additional construction phase services due to construction delays, additional work, or any other reason not due to the negligent acts of GHD until final completion of the project has been achieved.

We look forward to your favourable and expeditious response to this proposal. If you have any questions or concerns please do not hesitate to contact me directly.

Yours sincerely,



Paul K. Baron
Principal

Attachments:

- Exhibit 01 – GHD CM Contract Extension Past Aug 2018 Email
- Exhibit 02 – SMCC July 2018 Summary Schedule
- Exhibit 03 – Projected Project Completion by Monthly Percent Completes Graph
- Exhibit 04 – ASRWWTP Weekly Labor Force Summary
- Exhibit 05 – GHD Progress Billing April 01 Through April 30, 2018 Email
- Exhibit 06 – GHD Project Time & Materials Rate Schedule
- Exhibit 07 – MOD 07 Additional CM Service Positions, Rates, and Hours
- Exhibit 08 – GHD Schedule of Estimated Expenses
- Exhibit 09 – GHD Progress Billing April 01 Through April 30, 2018 Email
- Exhibit 10 – GHD Corporate 2018 Fee Schedule and Chargeout List for Reproduction Supplies

**EXHIBIT 01:
GHD CM Contract Extension Past Aug 2018 Email**

Bryan Ryley

From: John Davis <jdavis@guamwaterworks.org>
Sent: Thursday, September 20, 2018 9:39 AM
To: Bryan Ryley
Subject: RE: Agat-SR WWTP / GHD CM Contract >> Extension past Aug 2018 (Phone comm 17Sep18)>>PLEASE PROCEED ...PROPOSED CHANGE ODER NO. 6

Morning Bryan,
Looks good.

Please proceed with putting prices to these manhour projections, include material costs, and submit as soon as you can. Please reference this action as "Proposed Change Order No. 6."
Thanks, jd

From: Bryan Ryley [mailto:Bryan.Ryley@ghd.com]
Sent: Wednesday, September 19, 2018 4:09 PM
To: John Davis <jdavis@guamwaterworks.org>
Subject: RE: Agat-SR WWTP / GHD CM Contract >> Extension past Aug 2018 (Phone comm 17Sep18)

John,

Please take a look at the below and give me the green light. Thanks, Bryan Ryley

From: Bryan Ryley
Sent: Monday, September 17, 2018 3:38 PM
To: 'John Davis ' <jdavis@guamwaterworks.org>
Cc: Rylma Carino <rcarino@guamwaterworks.org>; Tom Cruz <thomas@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>
Subject: Agat-SR WWTP / GHD CM Contract >> Extension past Aug 2018 (Phone comm 17Sep18)

John,

Based on our phone call this morning, we have prepared a staffing matrix to estimate the utilization of additional CM staffing services for **September 2018 through April 2019**.

1. We have assumed current effort for **September 2018 through October 2018**. Columns highlighted in yellow.
2. We have reduced the PM effort from 100% to 75% and the Civil Inspector RFI & Submittal Manager from 100% to 50% for **November 2018 through January 2019**. Columns highlighted in blue.
3. We have reduced the PM effort from 75% to 50% and the Civil Inspector, RFI & Submittal Manager from 50% to 25%, and the Sr. Special Inspector from 15% to 0% for **February 2019 through April 2019**. Columns highlighted in green.
4. At this point, our estimate is for budgetary purposes as discussed. As you know, the Contractor has not been able to provide and achievable scheduled completion milestones, so our actual effort is dependent on the Contractors ability to complete their work in a timely manner.

5. Our services are now being provided on a time and materials based project, we recommend that the effort to complete the work be estimated as conservatively as practicable to avoid additional trips to the CCU "well", while maintaining appropriate staffing effort to complete our work.
6. We would like to request that the estimated staffing effort be managed as an overall budgetary amount allowing the flexibility for CM staffing to ramp our staff up and down based on the specific work activities being performed.

Kindly review that table below and items discussed above. If they are consistent with your request and to your satisfaction, we will proceed with the preparation of MOD 07. We have also responded to your comments below in "blue" font.

Working Days Per Month	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19
	22	23	22	21	23	20	21	22
Description/Labor Class								
Project Manager (B. Ryley)	100%	100%	75%	75%	75%	50%	50%	25%
Asst. Project Manager (S. Carbulido)	100%	100%	100%	100%	100%	100%	100%	100%
Structural/Sr.Special Inspector (A. Sutton)	15%	15%	15%	10%	5%	0%	0%	0%
Civil Inspector, RFI & Submittal Manager (J. Wu)	100%	100%	50%	50%	50%	25%	25%	25%
Civil Inspector/Structural (R. Miaco)	100%	100%	100%	100%	100%	100%	100%	100%
Technical Administrative Support (H. Cervania)	100%	100%	100%	100%	100%	100%	100%	100%

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
 865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Please consider our environment before printing this email

From: John Davis <jdavis@guamwaterworks.org>
Sent: Monday, September 17, 2018 11:11 AM
To: Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: Rylma Carino <rcarino@guamwaterworks.org>; Tom Cruz <thomas@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>
Subject: Agat-SR WWTP / GHD CM Contract >> Extension past Aug 2018 (Phone comm 17Sep18)

Bryan,

To verify we are in agreement on the items we discussed today, please inform me if you take exception to any of the following points:

- GHD will prepare a fee proposal for Sep 18 thru April 19 by the end of this week (Sep 21)
GHD: Agree.
- Fee proposal will show incremental reduction in fees after Oct to reflect decreasing contractor activity
GHD: Agree.
- CCU approval of additional funding will not occur until next CCU meeting in October

- GHD: Agree.**
- GWA requests GHD billing for months of June through Aug
GHD: We are in the process of preparing June 2018 invoice and will have it submitted before the end of the week.
 - GHD May invoice has been forwarded to GWA-Finance
GHD: Noted. Thank you.

Please notify me asap of any errors or omissions.

BR/jd



GUAM WATERWORKS AUTHORITY

J. McArthur Davis, PE

Civil Engineering Supervisor

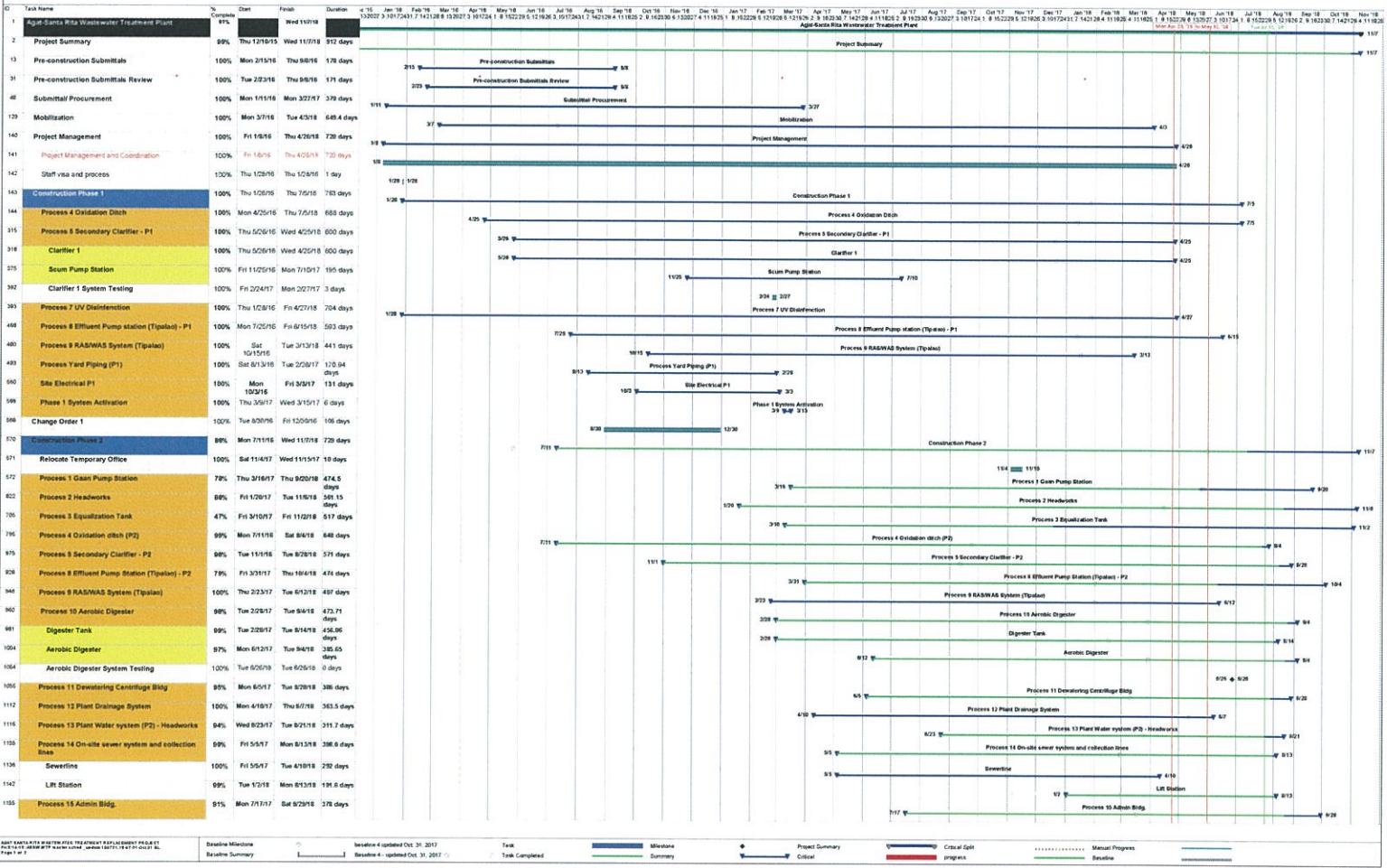
671-300-6041

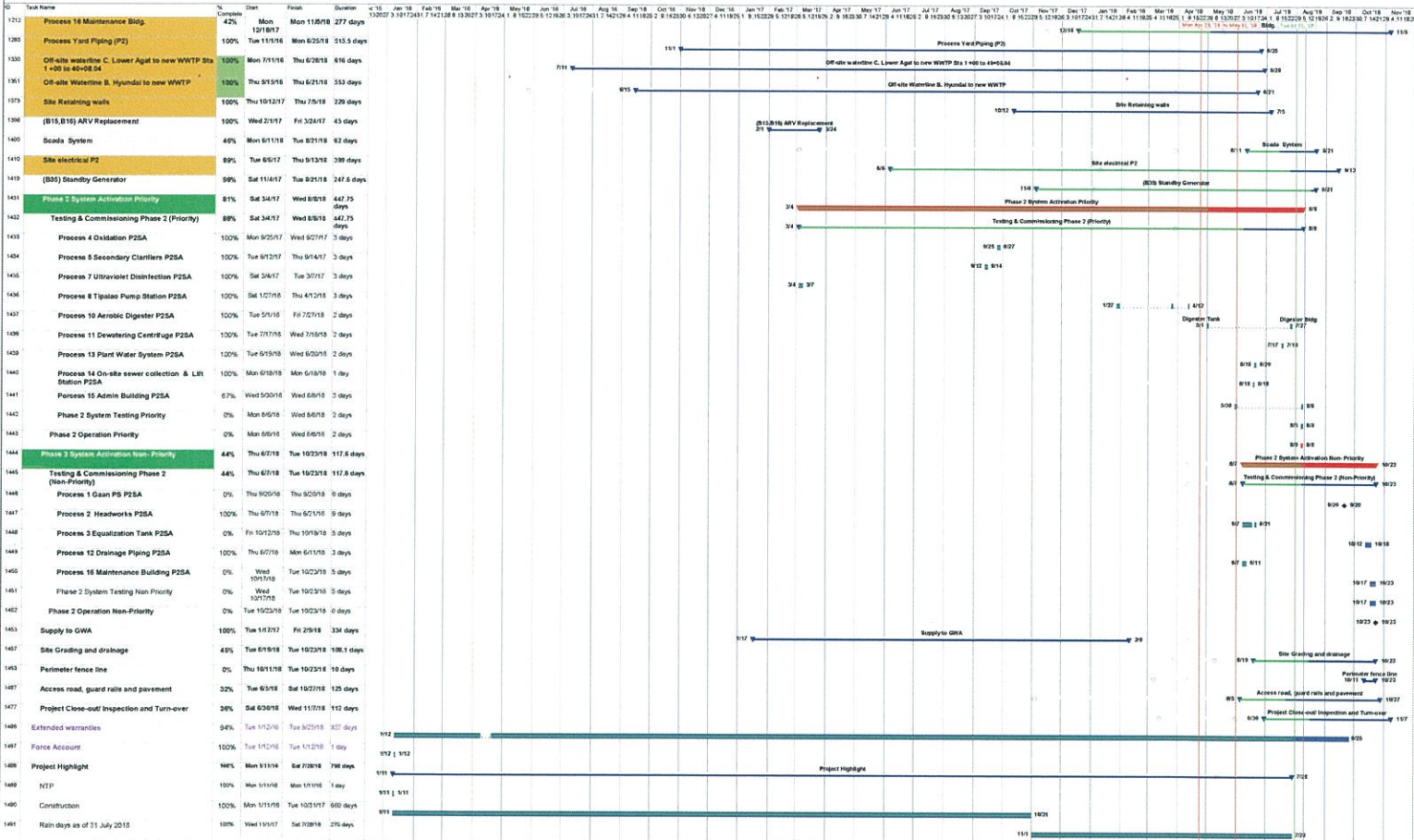
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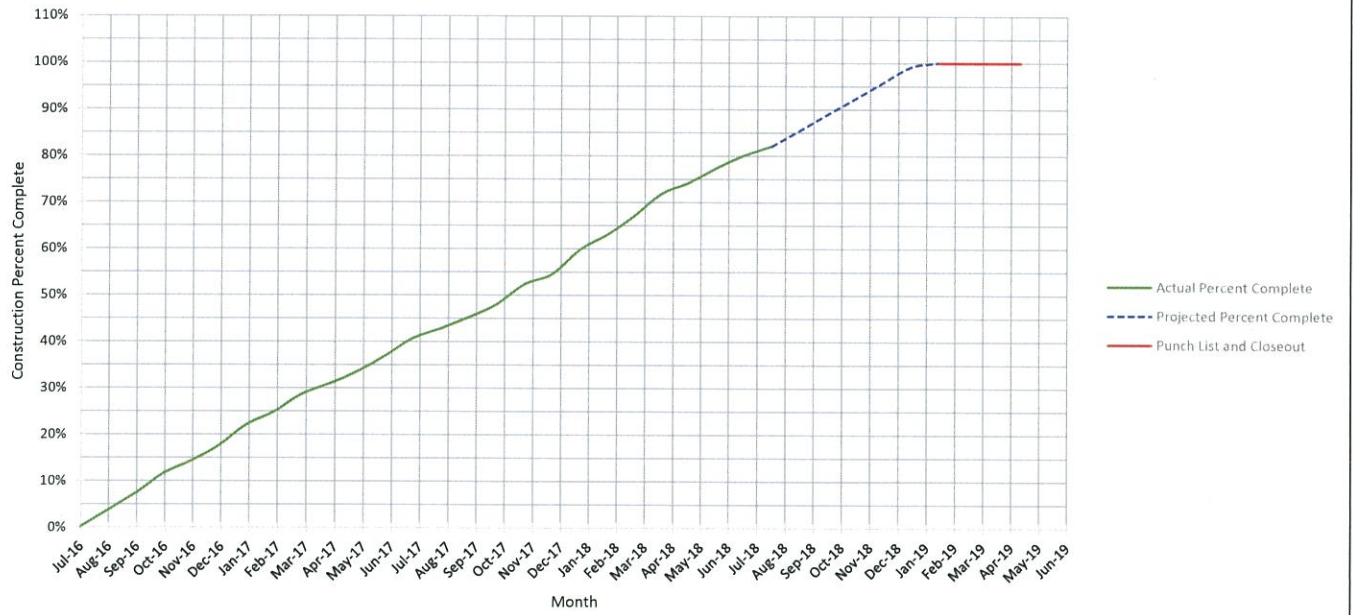
**EXHIBIT 02:
SMCC July 2018 Summary Schedule**





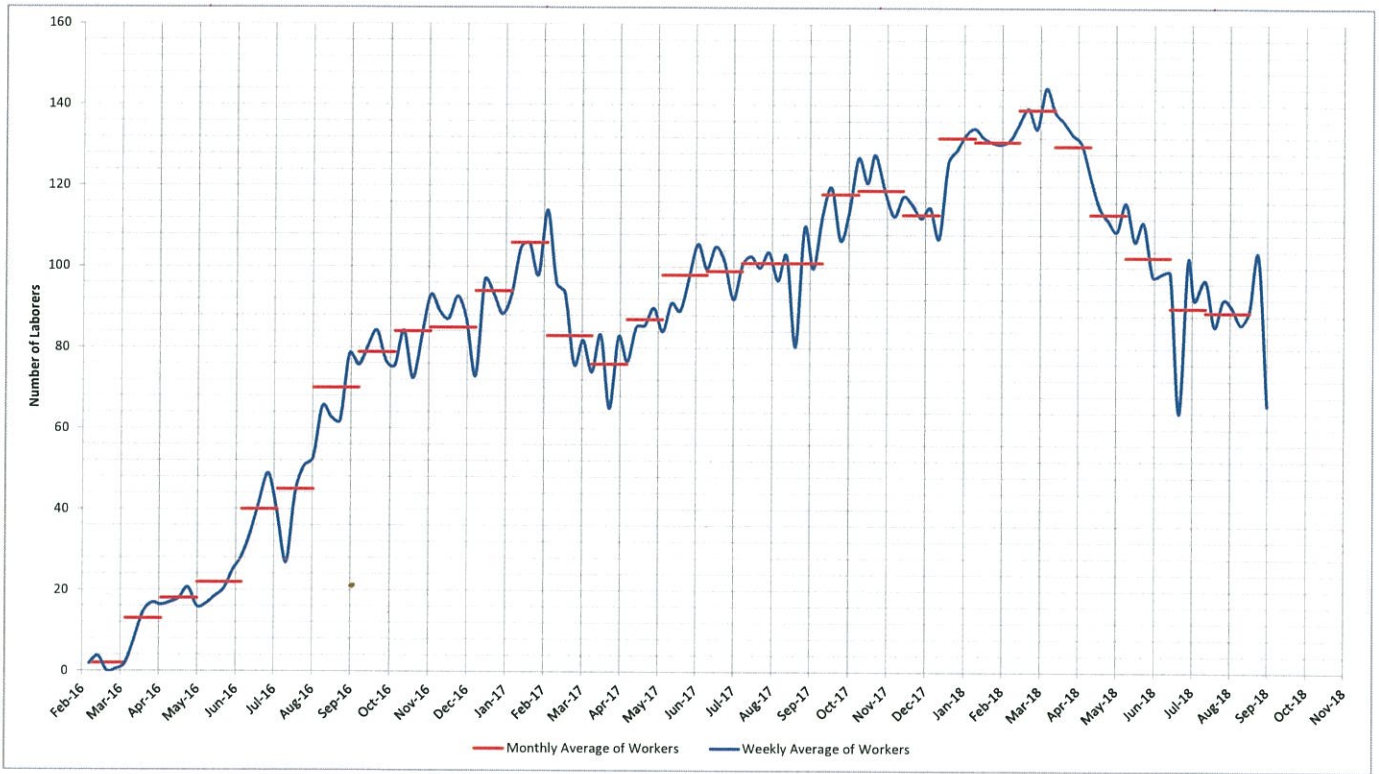
**EXHIBIT 03:
Projected Project Completion by Monthly Percent Completes Graph**

Projected Project Completion by Monthly Percent Completes



**EXHIBIT 04:
ASRWWTP Weekly Labor Force Summary**

AGAT-SANTA RITA WWTP REPLACEMENT PROJECT
WEEKLY LABOR FORCE SUMMARY



Note: Sundays and Holidays are not Included in this Graph

**EXHIBIT 05:
GHD Progress Billing April 01 Through April 30, 2018 Email**

Bryan Ryley

From: Thomas Cruz <thomas@guamwaterworks.org>
Sent: Thursday, July 19, 2018 2:39 PM
To: 'Miguel C Bordallo'; Paul Baron; 'John Davis '; Bryan Ryley
Cc: Joe Heitzler; 'Kelly Clark'
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)
Attachments: MCB OH Calcs 2018JUL13.xlsx

Paul,

Attached for your review and reference is a spreadsheet that calculates what GWA accepts for invoice rates for positions that are related to the above subject. I will work with my staff to get this official via a Change Order 4A. Additionally, GWA is amenable that you not make any adjustment to the invoice that is currently with GWA given your concern that this invoice is linked to your company's last fiscal year ending. GWA will expect though that subsequent invoices will follow the rates calculated and that your invoices will not exceed contract modification approval amounts.

We can definitely discuss further if you have any question. Please be advised GWA will be close July 20th in observance of Liberation Day.



GUAM WATERWORKS AUTHORITY

Thomas Cruz, P.E.
Chief Engineer
(671) 300-6036

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Wednesday, July 18, 2018 5:37 PM
To: 'Paul Baron' <Paul.Baron@ghd.com>; 'John Davis ' <jdavis@guamwaterworks.org>; 'Bryan Ryley' <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'Joe Heitzler' <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

GWA will issue a Mod4A to clarify and address the acceptable OH&P for T&M invoices. As I understand it, Mod5 will follow and reflect the change in your rates with your new FY. Tom will be packaging this and will coordinate any issues related to your request at our last meeting.

Regards,

MCB

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Wednesday, July 11, 2018 3:15 PM
To: Miguel C Bordallo <mcbordallo@guamwaterworks.org>; 'John Davis ' <jdavis@guamwaterworks.org>; Bryan Ryley

<Bryan.Ryley@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Here is blended direct for the positions, note July 1 was beginning of FY and raises become effective. Coming over now.
Regards

Paul

	Rate Through 6/30/18	Rate Effective 7/1/2018
1. Project Manager	\$ 72.98	\$ 74.52
2. Structural/Special Inspector	\$ 55.00	\$ 55.66
3. Civil Inspector/Structural	\$ 30.80	\$ 31.47
4. Asst. Project Manager	\$ 32.68	\$ 33.34
5. Civil Inspector	\$ 30.80	\$ 31.47
6. Submittal/RFI Manager	\$ 27.20	\$ 28.22

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>

Sent: Wednesday, 11 July 2018 1:31 PM

To: Paul Baron <Paul.Baron@ghd.com>; 'John Davis ' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

Please provide direct hourly labor rates for the following individuals (April Invoice):

1. Bryan Ryley
2. Jeff Groom
3. Joseph Wu
4. Steven Carbullido
5. Ramon Calilung
6. Rodolfo Miaco
7. Heidi Cervania

In the alternate, please provide a direct hourly composite rate for the following positions (Original Fee Proposal):

1. Project Manager
2. Structural/Special Inspector
3. Civil Inspector/Structural
4. Asst. Project Manager
5. Civil Inspector
6. Submittal/RFI Manager

I have reviewed the audit provided and have what I believe to be an acceptable OH rate in hand, but want to calculate the hourly rates to evaluate against positions we are being invoiced for. Trying to expedite resolution on this matter and appreciate your patience.

Regards,

MCB

From: Paul Baron <Paul.Baron@ghd.com>

Sent: Monday, July 9, 2018 5:00 PM

To: John Davis <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

I did meet with Miguel, I believe he has everything he requested from me to evaluate the issue. I believe Bryan is asking if you have everything that you requested below, which I believe you do but let us know.

Regards

Paul

From: John Davis <jdavis@guamwaterworks.org>

Sent: Monday, 9 July 2018 4:56 PM

To: Bryan Ryley <Bryan.Ryley@ghd.com>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Bryan,

My understanding was that Mr. Baron intended to make an appeal to "...Miguel and upper management" (per June 6 email.) I have not been informed of the outcome of this appeal. Please clarify.

Thank you.



GUAM WATERWORKS AUTHORITY

J. McArthur Davis, PE

Civil Engineering Supervisor

671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]

Sent: Monday, July 09, 2018 9:43 AM

To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo'

<mcbordallo@guamwaterworks.org>

Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Mr. Davis,

Kindly advise the status for processing of Payment Application No. 31 for work completed April 01 through April 30, 2018.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Please consider our environment before printing this email

From: Bryan Ryley

Sent: Friday, June 29, 2018 7:02 PM

To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised>>J DAVIS RESPONSE 29JUN18

Mr. Davis,

Please see attached.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Please consider our environment before printing this email

From: John Davis <jdavis@guamwaterworks.org>

Sent: Friday, June 29, 2018 3:22 PM

To: Bryan Ryley <Bryan.Ryley@ghd.com>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised>>J DAVIS RESPONSE 29JUN18

Bryan,

Unfortunately, the approval of this invoice cannot be expeditious as the supporting paperwork/invoices are scattered through about 300 pages, and are not summarized in a fashion that can be readily verified. More importantly, **the overhead and profit *per centage* on wages and expenses has not been established.**

Kindly perform the following actions so that this invoice may be processed:

- Help establish an OH&P rate that is acceptable to GWA and GHD managers;
GHD: Attached are our various standard labor rates. Pick the column you are most comfortable with.
- Identify the invoice as No. 31 (not no. 32);
GHD: Noted and corrected.
- Summarize the hours for each person on a single sheet;
GHD: The requested hours worked by each staff person were provided as the 11th sheet of the previously submitted payment application. We have also provided it as a separate attachment to this email.
- Summarize the expenses by itemizing each separate expenditure on a single sheet;
GHD: All the expenses were provided with itemized summaries in the previously submitted payment application. To assist your review we have provided a single sheet summarizing all the expense, listed each expense in the table of contents, provided reference letter for each expense correlating to the "single sheet expense summary". In addition, we have also provided it as a separate attachment to this email. Also, hard copies of same were provided in the first submittal package.
- For future invoices, indicate the number of hours each day each employee charges to a specific task;
GHD: Sure, we can provide the same "Labor Summary per Task" as provide in the previous application and attached.
- Several expense items were paid previously by GWA and will need to be omitted.
GHD: Kindly identify the expenses you believe have been previously invoiced and we will review.

Thank you for your cooperation.

John



GUAM WATERWORKS AUTHORITY

J. McArthur Davis, PE

Civil Engineering Supervisor

671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]

Sent: Friday, June 22, 2018 7:56 PM

To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo'

<mcbordallo@guamwaterworks.org>

Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised

John,

Please revised April 2018 invoice for the Agat-Santa Rita WWTP Replacement Project. Thank you for your patients and support. We can meet if you would like to discuss the details. Otherwise, we look forward to your favorable and expeditious approval of this revised invoice. Please do not hesitate to contact me directly should you have any questions or concerns. Have a nice weekend.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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From: John Davis <jdavis@guamwaterworks.org>

Sent: Friday, June 22, 2018 6:02 PM

To: Paul Baron <Paul.Baron@ghd.com>; Bryan Ryley <Bryan.Ryley@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED

Paul, Bryan,

Has any progress been made on this issue?

Thanks,
John

From: Paul Baron [<mailto:Paul.Baron@ghd.com>]

Sent: Wednesday, June 06, 2018 1:26 PM

To: John Davis <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED
Importance: High

John,

We are appealing your decision on this to Miguel and upper management.

Bryan

Please proceed accordingly to follow up on our side with legal and contracts as well to arrange for a meeting.

Regards

Paul

From: John Davis <jdavis@guamwaterworks.org>
Sent: Wednesday, 6 June 2018 1:22 PM
To: Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED

Hafa Adai Bryan,

We have unfortunately overlooked agreeing upon an OH&D markup for salaries. Since this contract is now on a Time and Materials basis, an agreed mark-up *per centage* for salaries and expenses must be established. The previous markup of approx. 200% for salaries can no longer be maintained. {Note that this 200% markup for overhead and profit now accounts for over \$2M in payments.} Also note that my position may be appealed to GWA's upper management.

Kindly also provide how much time that staff devotes to each SOW item. This is important to justify the need for six fulltime staff.

This issue can be included on today's monthly project meeting, or discussed at a separate meeting.

Thank you for your cooperation.

John



GUAM WATERWORKS AUTHORITY
J. McArthur Davis, PE
Civil Engineering Supervisor
671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]
Sent: Monday, June 04, 2018 3:20 PM
To: GWA - John Davis <jdavis@guamwaterworks.org>
Cc: 'Thomas Cruz' (thomas@guamwaterworks.org) <thomas@guamwaterworks.org>; rcarino <rcarino@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>
Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

June 4, 2018

Mr. John Davis, P.E.

Guam Waterworks Authority

Gloria B. Nelson Public Utilities Complex

Route 15, Mangilao, Guam

Re: Agat WWTP Replacement Construction Management for Agat WWTP Replacement

Project No. S14-002-BND, GHD April 2018 Invoice No. 100786

Dear Mr. Davis,

Please find attached **Invoice No. 100786** for CM Services from April 1, 2018 through April 30, 2018 in the amount of **Two Hundred Eight Thousand Nine Hundred Fifty-Five Dollars and 15/100 (\$208,955.15)**. This consists of \$141,007.50 in GHD labor, \$34,074.69 in expenses for April 2018, and \$23,425.50 in expenses related to the additional work for the Clearing and Grading Phase authorized under MOD 04. As agreed to with GWA, work performed during this period has been performed on a time and material basis and includes, but was not limited to, the following:

Project administration, implementation & maintenance of project controls, project correspondence, review and processing of submittals & shop drawings, payment request, conduct weekly progress meetings, review and process requests for information, general compliance monitoring, claims and disputes, maintain project records & document management, construction inspection and quality control monitoring.

We have itemized each of the SOW tasks performed by each staff member and sub consultants. As discussed with you previously, the tasks have not changed, just the duration for which our services were performed as this is driven directly by the Contractor's performance.

A hardcopy with appendices will be submitted to your office tomorrow. Please do not hesitate to contact me directly should you have any questions or concerns.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Attachments: Invoice 97869, Detailed Spread Sheet, Monthly Progress Report

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A. GHD Audited OH

1 Total Indirect Expenses	\$	65,027,762
2 Less FAR Unallowable Expenses	\$	(4,565,257)
a Salaries and Wage adjustments	\$	(438,021)
b Travel	\$	(1,322)
c Bad Debts	\$	55,491
d Marketing and Advertising	\$	(277,019)
e Entertainment	\$	(142,026)
f Professional Fees	\$	(791,359)
g Other expense adjustments	\$	(261,779)
h Tax Expenses	\$	(2,199,437)
i Interest Expense	\$	(602,075)
j Facilities capital cost of money	\$	92,290
3 Adjusted Total Indirect Expenses (1-2)	\$	60,462,505
4 Direct Expenses	\$	36,155,013
5 FAR Compliant OH (3 / 4)		167%

B. Profit

10%

C. GRT

4.1667%

D. Invoice Rates (includes GRT) - Up to June 30th

	Direct (\$/hr)	Loaded (\$/hr)
1 Project Manager	\$72.98	\$ 223
2 Structural/Special Inspector	\$55.00	\$ 168
3 Civil Inspector/Structural	\$30.80	\$ 94
4 Asst. Project Manager	\$32.68	\$ 100
5 Civil Inspector	\$30.80	\$ 94
6 Submittal/RFI Manager	\$27.20	\$ 83

E. Invoice Rates (includes GRT) - After June 30th

	Direct (\$/hr)	Loaded (\$/hr)
1 Project Manager	\$74.52	\$ 228
2 Structural/Special Inspector	\$55.66	\$ 170
3 Civil Inspector/Structural	\$31.47	\$ 96
4 Asst. Project Manager	\$33.34	\$ 102
5 Civil Inspector	\$31.47	\$ 96
6 Submittal/RFI Manager	\$28.22	\$ 86

For Comparison - MOD 04

Loaded (\$/hr)
\$ 221
\$ 110
\$ 121
\$ 121
\$ 101
\$ 101

**EXHIBIT 06:
GHD Project Time & Materials Rate Schedule**

GHD - PROJECT TIME & MATERIALS RATE SCHEDULE

Project Name: Agat-Santa Rita Waste Water Treatment Plant Replacement
GHD Project Number: 11109000
Prepared by: Bryan J. Ryley

Attachment:
of:
Checked by: Paul K. Baron
Date:

C	D	E	F	G	H	I
Category	Direct Hourly Rate	GWA Loaded (\$/hr) w/o GRT (Up to June 30th)	GWA Loaded (\$/hr) w/o GRT (After June 30th)	GHD US West Standard Charge Rates w/o GRT	Delta (E - G) (Up to June 30th)	Delta (F - G) (After June 30th)
Project Manager	\$72.98	\$214.34	\$218.87	\$200.00	\$14.34	\$18.87
Asst. Project Manager	\$32.68	\$95.98	\$97.92	\$130.00	-\$34.02	-\$32.08
Structural/Special Inspector	\$55.00	\$161.54	\$163.47	\$234.00	-\$72.46	-\$70.53
Civil Inspector/RFI/Submittal	\$30.80	\$90.46	\$92.43	\$135.00	-\$44.54	-\$42.57
Civil/Special Inspector	\$30.80	\$90.46	\$92.43	\$130.00	-\$39.54	-\$37.57
Technical Administration	\$27.20	\$79.89	\$82.88	\$100.00	-\$20.11	-\$17.12

EXHIBIT 07:
MOD 07 Additional CM Service Positions, Rates, and Hours

Agat-Santa Rita Waste Water Treatment Plant Repalcemeny Project - Phase II
MOD 07 - Additional CM Services
(September 01, 2018 through April 30, 2019)

Month		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Total
Working Days Per Month		20	23	22	21	23	20	21	22	43
Description/Labor Class	Rate									
		160	184	132	126	138	80	84	88	992
Project Manager	\$218.87	\$35,019	\$40,272	\$28,891	\$27,578	\$30,204	\$17,510	\$18,385	\$19,261	\$217,119
		160	184	176	168	184	160	168	176	1376
Assistant PM	\$97.92	\$15,667	\$18,017	\$17,234	\$16,451	\$18,017	\$15,667	\$16,451	\$17,234	\$134,738
		24	28	26	17	18	0	0	0	113
Structural/Sr. Special Inspector	\$163.47	\$3,923	\$4,512	\$4,316	\$2,746	\$3,008	\$0	\$0	\$0	\$18,505
		160	184	88	84	92	40	42	44	734
Civil Inspector, RFI & Submittal Manager	\$97.92	\$15,667	\$18,017	\$8,617	\$8,225	\$9,009	\$3,917	\$4,113	\$4,308	\$71,873
		160	184	176	168	184	160	168	176	1376
Civil/Special Inspector	\$92.43	\$14,789	\$17,007	\$16,268	\$15,528	\$17,007	\$14,789	\$15,528	\$16,268	\$127,184
		160	184	176	168	184	160	168	176	1376
Technical Administrative Support	\$82.88	\$13,261	\$15,250	\$14,587	\$13,924	\$15,250	\$13,261	\$13,924	\$14,587	\$114,043
TOTAL (hr)		824	948	774	731	800	600	630	660	5967
TOTAL GHD LABOR ESTIMATE		\$ 98,326	\$ 113,075	\$ 89,912	\$ 84,452	\$ 92,495	\$ 65,143	\$ 68,400	\$ 71,658	\$683,462

**EXHIBIT 08:
GHD Schedule of Estimated Expenses**

GHD - SCHEDULE OF ESTIMATED EXPENSES

Project Name: Agat-Santa Rita Waste Water Treatment Plant Replacement	Attachment:
GHD Project Number: 11109000	of:
Prepared by: Bryan J. Ryley	Checked by: Paul K. Baron
	Date:

ITEM NO.	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT	MARKUP	TOTAL
1.0	SITE CONSUMABLE COST					\$ 500.00
1.1	Copy Express Prints					\$ 100.00
1.2	Cost-U-Less					\$ 100.00
1.3	Home Depot					\$ 100.00
1.4	National Office Supplies					\$ 100.00
1.5	Payless Supermarket					\$ 100.00
2.0	REPRODUCTION CONSUMABLE COST					\$ 1,090.00
2.1	DPW Monthly Special Inspection Report					\$ 120.00
2.2	Monthly GWA Manager's Meeting Report					\$ 200.00
2.3	ASRWWTP Weekly Progress Meetings					\$ 320.00
2.4	Other					\$ 450.00
3.0	TELEPHONE & DATA CONSUMABLE COST					\$ 446.00
3.1	Telephone Expense					\$ 286.00
3.2	Site Internet Expense					\$ 160.00
4.0	MOTOR VEHICLE CONSUMABLE COST					\$ 4,850.00
4.1	2015 Nissan Rogue (TO2715)					\$ 2,100.00
4.2	2017 GMC Canyon (YN4682)					\$ 2,300.00
4.3	GHD Joe W. POV Mileage					\$ 290.00
4.4	GHD Steven C. POV Mileage					\$ 160.00
5.0	EQUIPMENT CONSUMABLE COST					\$ 6,113.00
5.1	Site Camera Expense (Earthcam)					\$ 2,633.00
1	Robotic Camera Software Support & Archiving					
2	20GB monthly data					
3	Earthcam - Construction Cam Lite HD					
5.2	Site Camera Expense (Workzone)					\$ 1,886.00
1	Work Zone Cam - 8MP Fully Hosted Service					
2	20GB monthly data					
3	Workzone - 18 Megapixel SLR Camera System					
5.3	Kawasaki Mule 4010 trans 4x4					\$ 1,450.00
5.4	Drone Expense					\$ 144.00
6.0	SUBCONSULTANT COST					\$ 15,700.00
6.1	LD Matson					\$ 2,700.00
6.2	Wixon & Associates					\$ 13,000.00
7.0	QUALITY ASSURANCE COST					\$ 3,950.00
7.1	QA Survey - Guam Surveyor, LLC					\$ 2,000.00
7.2	QA Compaction - Geo-Engineering & Testing, Inc.					\$ 750.00
7.3	QA Concrete - Geo-Engineering & Testing, Inc.					\$ 1,200.00
GRAND TOTAL						\$ 32,649.00

**EXHIBIT 09:
GHD Progress Billing April 01 Through April 30, 2018 Email**

Bryan Ryley

From: Paul Baron
Sent: Friday, August 17, 2018 6:18 AM
To: Miguel C Bordallo; 'Kelly Clark'; 'Thomas Cruz'
Cc: 'John Davis'; Bryan Ryley; Joe Heitzler; Peggy DeZurik
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Importance: High

Miguel,

Thanks for the follow up. As you know, this is an audited rate prepared by a licensed accounting firm meeting FARS standards, which was intended to avoid issues like this but I will defer to your request.

From my perspective I thought we were giving GWA a deal but if you want us to account for it manually we will. Note, the typical field costs for consumables is closer to \$11/hr, I am not sure exactly where the real costs may fall but it is quite possible that it will exceed the \$4.38/hr when we track it manually.

We will follow up with the revision to document this for the expensable items along with the other expenses we are carrying (subs, QA testing etc.) that still needs to be formally documented in the mod. We have over two months of invoices that have been on hold due to this and we really need to get them processed.

Thanks and Regards
Paul

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Wednesday, 15 August 2018 3:49 PM
To: Paul Baron <Paul.Baron@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; Peggy DeZurik <Peggy.DeZurik@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

Based on the information provided, GHDs contention is that for each hour one of your employees works at the project site, that person is burning through \$4.38 of consumables This includes "all printing, phone, fax, internet, and other consumables for GHD."

For the four positions other than the PM working full time on our project, that is about \$2800/month on consumables, which represents 5% of total loaded labor costs for those 4 positions, or 14% of total direct labor costs for those 4 people.

That figure appears excessive from my perspective, especially at this stage of the project. However, GWA does not object for consumables to be billed as a T&M expenses with the proper documentation.

MCB

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Monday, August 6, 2018 6:56 PM
To: Miguel C Bordallo <mcbordallo@guamwaterworks.org>; 'Kelly Clark' <koclark@guamwaterworks.org>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; Peggy DeZurik <Peggy.DeZurik@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Let me know if you have had a chance to look at this.

Regards

Paul

From: Paul Baron
Sent: Thursday, 2 August 2018 11:56 AM
To: 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>; 'Kelly Clark' <koclark@guamwaterworks.org>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; Peggy DeZurik <Peggy.DeZurik@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Miguel,

I Just got the feedback from our accounting:

1. All jobs bear the cost of the consumables, and for every hour worked (on any job) we transfer \$4.38 out of overhead. If the cost recovery only accounted for projects where the consumables was paid by the client (for instance, projects where we get a higher labor rate per hour but don't invoice for consumables) the overhead rate would be higher.
2. The direct amount described in the second highlighted segment is \$4.38 which is for office overhead. Thus, the standard \$6 per hour includes a markup on the \$4.38. Note this is for office overhead, field overhead is closer to \$11 per hour but we do not have this audited yet.

Based on the above can we get the \$4.38?

Let me know. I have copied Peggy Dezurick our Finance Manager who can answer any additional questions.

Regards

Paul

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Wednesday, 1 August 2018 11:49 AM
To: Paul Baron <Paul.Baron@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Questions:

The information below reads, "These costs are shown as a reduction to the indirect cost pool and are consistently charged to contracts whether or not such charges are reimbursed under the contract. Additionally the company records a reduction to the indirect cost pool based on a standard consumable rate for each direct labor hour charged to the project when allowed by the contract with the client."

1. Does the first highlighted segment mean that if GWA agrees to the hourly consumables charge, but other clients do not agree, that GWA is “subsidizing” the consumables for the other client?
2. Is the standard consumable rate described in the second highlighted segment, which is deducted from the indirect cost pool, the same as the consumable rate which is proposed to be charged to GWA?

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Wednesday, August 1, 2018 11:28 AM
To: Kelly Clark <koclark@guamwaterworks.org>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Thanks. We will follow the 4.167% for the GRT. I have sent Miguel under separate cover our full audit with supplemental information regarding the consumable (sorry I just got a full copy of this myself). Below is an excerpt from the audit regarding our consumable charge. The consumables dollars are pulled out of our overhead (see the clip below) and transferred to direct costs. If we didn't use consumables our overhead rate would be higher. GHD has implemented a system of billing for telephone calls, photocopies, blue prints, etc. in the aggregate, on a per hour basis. Each year the total costs of phone calls, photocopies, faxes, company cars, and other project related in-house direct costs are compiled from our general ledger. The total is then divided by the number of hours worked during the same period. By dividing the total project-related direct in-house costs (ODC's) by the number of hours worked, both direct and indirect, we arrive at an average hourly cost to provide these services to our clients. Our subsequent analysis has proved this approach to be cost effective for our firm because we are not spending time logging and entering each of these individual activities – and cost effective for our clients as well. This calculation has been audited by DCAA, Cal Trans, and other government agencies, and has been approved by all.

Let me know your thoughts.

Regards

Paul

Entertainment	142,026
Professional fees	1,994,699
Dues and subscriptions	222,625
Other expenses	909,146
Direct cost credit (Note 1)	(1,452,051)

Direct cost credit - Direct cost credit represents the charge to contracts for non-salary direct expenses including computer costs, CADD, reproduction, and equipment charges that were initially charged to the indirect cost pool. Charges are based on actual usage records times standard cost per usage. These costs are shown as a reduction to the indirect cost pool and are consistently charged to contracts whether or not such costs are reimbursed under the contract. Additionally, the Company records a reduction to the indirect cost pool based on a standard consumable rate for each direct labor hour charged to the project when allowed by the contract with the client.

From: Kelly Clark <koclark@guamwaterworks.org>
Sent: Tuesday, 31 July 2018 11:24 AM
To: 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

GRT applicability is prospective from the date the Gov signed the bill. Any bids opened before that date are not subject to the increase.

KC



Put respetu,

Kelly O. Clark
General Counsel
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, Guam 96913
Telephone No.: (671) 300-6853 cell: 671-480-4224
E-mail address: koclark@guamwaterworks.org

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From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Tuesday, July 31, 2018 9:23 AM
To: 'Paul Baron' <Paul.Baron@ghd.com>; 'Thomas Cruz' <thomas@guamwaterworks.org>
Cc: 'John Davis' <jdavis@guamwaterworks.org>; 'Bryan Ryley' <Bryan.Ryley@ghd.com>; 'Joe Heitzler' <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

No increase in GRT is needed. My understanding is that the increase is not applicable to contracts entered into prior to the effective date of the increase. Please double-check this.

Please provide detail on how the \$6/hr consumable charge was calculated prior to our agreeing to the charge.

MCB

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Monday, July 30, 2018 3:33 PM

To: Thomas Cruz <thomas@guamwaterworks.org>

Cc: Miguel C Bordallo <mcbordallo@guamwaterworks.org>; John Davis <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; Kelly Clark <koclark@guamwaterworks.org>

Subject: Re: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Tom

Thanks for sending us the proposed rates. Although we were hoping for a little bit higher rates, we understand the current situation of project funding, and agree to the proposed mod. The following are a few clarifications that we would request GWA to consider:

1. We will separate out the GRT in the rates to get the "new billable rates" for invoicing in our system and then we'll add the GRT onto the total invoice amount. This won't change the net total GHD labor cost GWA proposed.
2. We should increase the GRT from 4.167% to 5.263% as it has been increased by the Government of Guam.
3. Based on our meeting with Miguel, we will also invoice for our incurred expenses (QA Services, monthly safety inspections, Site Camera's, Scheduler, Electrical Special Inspection, etc.). In addition we are requesting GWAs consideration to include the \$6 per hour consumable charge for our labor which covers all printing, phone, fax, internet, and other consumables for GHD. I don't think we discussed the consumable charge with Miguel but it is part of the audit that was used to determine the rates.

Let us know if this is acceptable as we would like to proceed with preparation and submittal of our May and June 2018 invoicing.

Thank you,

Regards

Paul

On Jul 18, 2018, at 6:40 PM, Thomas Cruz <thomas@guamwaterworks.org> wrote:

Paul,

Attached for your review and refence is a spreadsheet that calculates what GWA accepts for invoice rates for positions that are related to the above subject. I will work with my staff to get this official via a Change Order 4A. Additionally, GWA is amenable that you not make any adjustment to the invoice that is currently with GWA given your concern that this invoice is linked to your company's last fiscal year ending. GWA will expect though that subsequent invoices will follow the rates calculated and that your invoices will not exceed contract modification approval amounts.

We can definitely discuss further if you have any question. Please be advised GWA will be close July 20th in observance of Liberation Day.

<image001.jpg>

Thomas Cruz, P.E.
Chief Engineer
(671) 300-6036

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Wednesday, July 18, 2018 5:37 PM
To: 'Paul Baron' <Paul.Baron@ghd.com>; 'John Davis ' <jdavis@guamwaterworks.org>; 'Bryan Ryley' <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'Joe Heitzler' <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

GWA will issue a Mod4A to clarify and address the acceptable OH&P for T&M invoices. As I understand it, Mod5 will follow and reflect the change in your rates with your new FY. Tom will be packaging this and will coordinate any issues related to your request at our last meeting.

Regards,

MCB

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Wednesday, July 11, 2018 3:15 PM
To: Miguel C Bordallo <mcbordallo@guamwaterworks.org>; 'John Davis ' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Here is blended direct for the positions, note July 1 was beginning of FY and raises become effective. Coming over now.

Regards
Paul

	Rate Through 6/30/18	Rate Effective 7/1/2018
1. Project Manager	\$ 72.98	\$ 74.52
2. Structural/Special Inspector	\$ 55.00	\$ 55.66
3. Civil Inspector/Structural	\$ 30.80	\$ 31.47
4. Asst. Project Manager	\$ 32.68	\$ 33.34
5. Civil Inspector	\$ 30.80	\$ 31.47
6. Submittal/RFI Manager	\$ 27.20	\$ 28.22

From: Miguel C Bordallo <mcbordallo@guamwaterworks.org>
Sent: Wednesday, 11 July 2018 1:31 PM
To: Paul Baron <Paul.Baron@ghd.com>; 'John Davis ' <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Kelly Clark' <koclark@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Paul,

Please provide direct hourly labor rates for the following individuals (April Invoice):

1. Bryan Ryley
2. Jeff Groom
3. Joseph Wu
4. Steven Carbullido
5. Ramon Calilung
6. Rodolfo Miaco
7. Heidi Cervania

In the alternate, please provide a direct hourly composite rate for the following positions (Original Fee Proposal):

1. Project Manager
2. Structural/Special Inspector
3. Civil Inspector/Structural
4. Asst. Project Manager
5. Civil Inspector
6. Submittal/RFI Manager

I have reviewed the audit provided and have what I believe to be an acceptable OH rate in hand, but want to calculate the hourly rates to evaluate against positions we are being invoiced for. Trying to expedite resolution on this matter and appreciate your patience.

Regards,

MCB

From: Paul Baron <Paul.Baron@ghd.com>
Sent: Monday, July 9, 2018 5:00 PM
To: John Davis <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

I did meet with Miguel, I believe he has everything he requested from me to evaluate the issue. I believe Bryan is asking if you have everything that you requested below, which I believe you do but let us know.

Regards

Paul

From: John Davis <jdavis@guamwaterworks.org>
Sent: Monday, 9 July 2018 4:56 PM
To: Bryan Ryley <Bryan.Ryley@ghd.com>; Paul Baron <Paul.Baron@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Bryan,

My understanding was that Mr. Baron intended to make an appeal to "...Miguel and upper management" (per June 6 email.) I have not been informed of the outcome of this appeal. Please clarify.

Thank you.

<image004.png>

J. McArthur Davis, PE
Civil Engineering Supervisor
671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]
Sent: Monday, July 09, 2018 9:43 AM
To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

Mr. Davis,

Kindly advise the status for processing of Payment Application No. 31 for work completed April 01 through April 30, 2018.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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From: Bryan Ryley
Sent: Friday, June 29, 2018 7:02 PM
To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven

Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised>>J DAVIS RESPONSE 29JUN18

Mr. Davis,

Please see attached.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Please consider our environment before printing this email

From: John Davis <jdavis@guamwaterworks.org>
Sent: Friday, June 29, 2018 3:22 PM
To: Bryan Ryley <Bryan.Ryley@ghd.com>; Paul Baron <Paul.Baron@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised>>J DAVIS RESPONSE 29JUN18

Bryan,

Unfortunately, the approval of this invoice cannot be expeditious as the supporting paperwork/invoices are scattered through about 300 pages, and are not summarized in a fashion that can be readily verified. More importantly, **the overhead and profit *per centage* on wages and expenses has not been established.**

Kindly perform the following actions so that this invoice may be processed:

- Help establish an OH&P rate that is acceptable to GWA and GHD managers;
GHD: Attached are our various standard labor rates. Pick the column you are most comfortable with.
- Identify the invoice as No. 31 (not no. 32);
GHD: Noted and corrected.
- Summarize the hours for each person on a single sheet;
GHD: The requested hours worked by each staff person were provided as the 11th sheet of the previously submitted payment application. We have also provided it as a separate attachment to this email.
- Summarize the expenses by itemizing each separate expenditure on a single sheet;

GHD: All the expenses were provided with itemized summaries in the previously submitted payment application. To assist your review we have provided a single sheet summarizing all the expense, listed each expense in the table of contents, provided reference letter for each expense correlating to the "single sheet expense summary". In addition, we have also provided it as a separate attachment to this email. Also, hard copies of same were provided in the first submittal package.

- For future invoices, indicate the number of hours each day each employee charges to a specific task;

GHD: Sure, we can provide the same "Labor Summary per Task" as provide in the previous application and attached.

- Several expense items were paid previously by GWA and will need to be omitted.

GHD: Kindly identify the expenses you believe have been previously invoiced and we will review.

Thank you for your cooperation.

John

<image004.png>

J. McArthur Davis, PE

Civil Engineering Supervisor

671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]

Sent: Friday, June 22, 2018 7:56 PM

To: John Davis <jdavis@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>

Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>

Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018):Revised

John,

Please revised April 2018 invoice for the Agat-Santa Rita WWTP Replacement Project. Thank you for your patients and support. We can meet if you would like to discuss the details. Otherwise, we look forward to your favorable and expeditious approval of this revised invoice. Please do not hesitate to contact me directly should you have any questions or concerns. Have a nice weekend.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

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Please consider our environment before printing this email

From: John Davis <jdavis@guamwaterworks.org>
Sent: Friday, June 22, 2018 6:02 PM
To: Paul Baron <Paul.Baron@ghd.com>; Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED

Paul, Bryan,

Has any progress been made on this issue?

Thanks,
John

From: Paul Baron [<mailto:Paul.Baron@ghd.com>]
Sent: Wednesday, June 06, 2018 1:26 PM
To: John Davis <jdavis@guamwaterworks.org>; Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED
Importance: High

John,
We are appealing your decision on this to Miguel and upper management.

Bryan
Please proceed accordingly to follow up on our side with legal and contracts as well to arrange for a meeting.
Regards
Paul

From: John Davis <jdavis@guamwaterworks.org>
Sent: Wednesday, 6 June 2018 1:22 PM
To: Bryan Ryley <Bryan.Ryley@ghd.com>
Cc: "Thomas Cruz" <thomas@guamwaterworks.org>; 'rcarino' <rcarino@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>; 'Miguel C Bordallo' <mcbordallo@guamwaterworks.org>
Subject: RE: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)::REJECTED

Hafa Adai Bryan,

We have unfortunately overlooked agreeing upon an OH&D markup for salaries. Since this contract is now on a Time and Materials basis, an agreed mark-up *per centage* for salaries and expenses must be established. The previous markup of approx. 200% for salaries can no longer be maintained. {Note that this 200% markup for overhead and profit now accounts for over \$2M in payments.} Also note that my position may be appealed to GWA's upper management.

Kindly also provide how much time that staff devotes to each SOW item. This is important to justify the need for six fulltime staff.

This issue can be included on today's monthly project meeting, or discussed at a separate meeting.

Thank you for your cooperation.
John

<image004.png>

J. McArthur Davis, PE
Civil Engineering Supervisor
671-300-6041

From: Bryan Ryley [<mailto:Bryan.Ryley@ghd.com>]
Sent: Monday, June 04, 2018 3:20 PM
To: GWA - John Davis <jdavis@guamwaterworks.org>
Cc: 'Thomas Cruz' (thomas@guamwaterworks.org) <thomas@guamwaterworks.org>; rcarino <rcarino@guamwaterworks.org>; Paul Baron <Paul.Baron@ghd.com>; Steven Carbullido <Steven.Carbullido@ghd.com>; Joe Heitzler <Joe.Heitzler@ghd.com>
Subject: Agat-Santa Rita WWTP Replacement (GHD Progress Billing April 01 through April 30, 2018)

June 4, 2018
Mr. John Davis, P.E.
Guam Waterworks Authority
Gloria B. Nelson Public Utilities Complex
Route 15, Mangilao, Guam

**Re: Agat WWTP Replacement Construction Management for Agat WWTP Replacement
Project No. S14-002-BND, GHD April 2018 Invoice No. 100786**

Dear Mr. Davis,

Please find attached **Invoice No. 100786** for CM Services from April 1, 2018 through April 30, 2018 in the amount of **Two Hundred Eight Thousand Nine Hundred Fifty-Five Dollars and 15/100 (\$208,955.15)**. This consists of \$141,007.50 in GHD labor, \$34,074.69 in expenses for April 2018, and \$23,425.50 in expenses related to the additional work for the Clearing and Grading Phase authorized under MOD 04. As agreed to with GWA, work performed during this period has been performed on a time and material basis and includes, but was not limited to, the following:

Project administration, implementation & maintenance of project controls, project correspondence, review and processing of submittals & shop drawings, payment request, conduct weekly progress meetings, review and process requests for information, general compliance monitoring, claims and disputes, maintain project records & document management, construction inspection and quality control monitoring.

We have itemized each of the SOW tasks performed by each staff member and sub consultants. As discussed with you previously, the tasks have not changed, just the duration for which our services were performed as this is driven directly by the Contractor's performance.

A hardcopy with appendices will be submitted to your office tomorrow. Please do not hesitate to contact me directly should you have any questions or concerns.

Thank you,

Bryan J. Ryley
Construction Manager

GHD

T: 671 472-6792 | F: 671 477-6229 | M: 671 797-3336 | VOIP: 860132 | E: bryan.ryley@ghd.com
865 South Marine Corps Drive, Suite 202, Tamuning, Guam 96913 USA | www.ghd.com

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Attachments: Invoice 97869, Detailed Spread Sheet, Monthly Progress Report

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<MCB OH Calcs 2018JUL13.xlsx>

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**EXHIBIT 10:
GHD Corporate 2018 Fee Schedule and Chargeout List for
Reproduction Supplies**



2018 Fee Schedule

Notes:

- 1) Rates are for employees of GHD companies.
- 2) Mileage rates are consistent with current IRS/Canada Revenue Agency rates, which is the rate at which employees are reimbursed.
- 3) Company owned vehicle rate is \$80.00/Day plus \$0.28/mile (USA) or \$0.24/km (CDN).
- 4) Travel charges are identified under disbursements and are passed through directly as incurred, all travel via common carrier being at coach class rates.
- 5) Accommodation expenses are identified under disbursements and are passed through directly as incurred. Lodging costs and meal allowances for each full day depend on the area.
- 6) Photocopy charges are \$0.10 per page.
- 7) Color photocopy charges are \$0.25 per page.
- 8) Information Technology is billed at \$4.50 per hour per person.
- 9) Specialized Computer Application is billed at \$15.00 per hour.
- 10) Other Office and Field Supplies are charged at standardized rates and are available upon request.
- 11) Other project related out of office disbursements, expenses, and subcontractor costs will be invoiced with a markup of 15%.
- 12) Fee schedule is subject to change on January 1, 2019.



Chargeout List for Reproduction Supplies

Display Materials:

Laminates - 8 ½" x 11"	\$1.50
Laminates - 11" x 17"	\$2.50
Recordable Compact Disk	\$2.00
Disc Labels	\$1.00
Flash Drives (1GB)	\$10.00

Color Photocopies:

8 ½" x 11" size/11" x 17" size on Bond	\$0.30
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Black & White Photocopies:

8 ½" x 11" size/11" x 17" size	\$0.10/copy
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Printed Plots:

24" x 36" or 36" x 48" Monochrome Laser	\$0.25/sq. ft.
Line Drawings Color 24" X 36" or 36" X 48" Color	\$2.00/sq. ft.
Full Graphic Color Oversize	\$3.50/sq. ft.

Printing Supplies:

Cover Stock (Front & Back Set)	\$0.75
Coverbind Cover Sets	\$5.00
Plastic Pockets	\$2.00
Binders - 1"	\$7.50
Binders - 1 ½"	\$8.50
Binders - 2"	\$9.50
Binders - 3"	\$11.50
Binders - 3 ½" and up	\$14.00

Tabs:

Figures, Tables, Appendices (A, B, C, etc.), Sections (1, 2, 3, etc.)	\$0.40/Tab
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Digital Equipment:

Digital Camera	\$10/day, \$35/week, \$100/month
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