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ADDENDUM

DATE: 12 MARCH 2024	FILE NO: ZNB 5771/2024-H/ADDENDUM2
TO: TENDER BIDDERS	FROM: MR TAKALANI NETSHIPALE PROJECT LEADER: PIETERMARITZBURG INFRASTRUCTURE MANAGEMENT HUB
SUBJECT: ADDENDUM NO.1 TO PROJECT ZNB 5771/2024-H	

1. PURPOSE

To issue Addendum no.1 to the project ZNB 5771/2024-H- SERVICING AND REFURBISHMENT OF SEWER WATER TREATMENT SYSTEMS AT 60 FACILITIES FOR 3-YEARS

2. BACKGROUND

At the compulsory briefing session that was held on 28 February 2024, a few enquiries were submitted to the Project Leader regarding clarifications on sections of the advertised bid document. To respond to the clarification requests, Addendum no. 1 is to be issued.

3. CLARIFICATIONS/AMENDMENTS

Addendum No. 1 serves to address the clarifications that were submitted to the Project Leader.

Please ensure that all bidders acknowledge the receipt of Addendum no. 1 through the completion of Section G in the tender document.

4.1. CLARIFICATIONS

Question 1:

Can the specifications for each component to be priced be included in the tender?

Clarification 1:

The specifications will be added to the tender document through Addendum no. 1. Page 41-43 and Page 54-57 have been attached for the bidders attention.

Question 2:

Can the specifications for each component to be priced be included in the tender?



KWAZULU-NATAL PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

Clarification 2:

The drawings aligned to the specifications may be requested from Lilliput Treatment Technologies, as per Page 45.

Prepared by:



**MS TAKALANI NETSHIPALE
PIETERMARITZBURG INFRASTRUCTURE
MANAGEMENT HUB**

11/03/2024

DATE

SECTION L: PRICING SCHEDULE

Name of bidder.....	Bid number: ZNB 5771/2024-H
Closing Time 11:00	Closing Date: 22 March 2023

OFFER TO BE VALID FOR **84** DAYS FROM THE CLOSING DATE OF BID.

Item	Description	Unit	Quantity	Rate	Amount
	<u>Service cost</u>				
	<u>Quarterly Service Cost per year for 60 units for year 1</u>				
1	Service of sewer treatment facilities per quarter	No.	60		
2	Chlorine dosing for all facilities per quarter	kg	416		
	Quarterly Total				
	Year 1 Total service cost Including escalations	No.	4		
	<u>Quarterly Service Cost per year for 60 units for year 2</u>				
3	Service of sewer treatment facilities per quarter	No.	60		
4	Chlorine dosing for all facilities per quarter	kg	416		
	Quarterly Total				
	Year 2 Total service cost Including escalations	No.	4		
	<u>Quarterly Service Cost per year for 60 units for year 3</u>				
5	Service of sewer treatment facilities per quarter	No.	60		
6	Chlorine dosing for all facilities per quarter	kg	416		
	Quarterly Total				
	Year 3 Total service cost Including escalations	No.	4		
SUBTOTAL 1 FOR YEAR 1, YEAR 2, YEAR 3					
	<u>Sampling and Testing for 60 Units</u>				
7	Sampling cost of 350 ml per quarter per facility (to be conducted during every second quarterly service) for Year 1	No.	240		
8	Sampling cost of 350 ml per quarter per facility (to be conducted during every second quarterly service) for Year 2 including escalations	No.	240		
9	Sampling cost of 350 ml per quarter per facility (to be conducted during every second quarterly service) for Year 3 including escalations	No.	240		
SUBTOTAL 2					

<u>Refurbishment Rate of sewer treatment facility components</u>					
10	Discharge Pump	Ea	Rate Only		
11	Balance Pump (pumps to be sized to suit capacity of incoming effluent. duty pump to switch on at low level control switch)	Ea	Rate Only		
12	Air - Blower	Ea	Rate Only		
13	Clarifier code 4	Ea	Rate Only		
14	Predigestion tank 5KL code 1	Ea	Rate Only		
15	Balance tank 5kl code 2	Ea	Rate Only		
16	Bio – Tower code 3	Ea	Rate Only		
17	Bio Reactor SBC 6 Code 3 with 1.450 Ø	Ea	Rate Only		
18	Bio Reactor SBC 12 Code 3 with 1.8 Ø	Ea	Rate Only		
19	Bio Reactor SBC 24 code 3 with 2.2 Ø	Ea	Rate Only		
20	Disinfectant tank (100 L) code 5	Ea	Rate Only		
21	Disinfectant tank (260 L) code 5	Ea	Rate Only		
22	Disinfectant tank (500 L) code 5	Ea	Rate Only		
23	Compression Rings	Ea	Rate Only		
24	DB Box	Ea	Rate Only		
25	Miscellaneous components	Ea	Rate Only		
26	50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant and in between all components (roughly 20 m per facility, once per year)	m	Rate Only		
27	Labour cost of site team	Ea	Rate Only		
	(Use your component rates above and Table 3 on page 52 to determine refurbishment budget)				
28	Refurbishment Budget in Year 1 for an estimate of 30% of the facilities	Sum	1		
29	Refurbishment Budget in Year 2 for an estimate of 20% of the facilities	Sum	1		
30	Refurbishment Budget in year 3 for an estimate of 10% of the facility	Sum	1		
SUBTOTAL 3					
<u>Ad-hoc Call Out Fees and Repairs</u>					
	Ad-hoc Call Out Fees Rate per facility	Ea	Rate Only		
31	Ad-hoc Call Out Fees and Repairs in Year 1 for the facilities (15% of the facilities)	Sum	1		
32	Ad-hoc Call Out Fees and Repairs in Year 2 for the facilities (8% of the facilities)	Sum	1		
33	Ad-hoc Call Out Fees and Repairs in year 3 for the facilities (15% of the facilities)	Sum	1		
SUBTOTAL 4					
<u>Disbursements</u>					
34	Other Specialist services	Prov Sum	1	R 200 000.00	R 200 000.00
35	Mark-up on Specialist services	%			
				R	200 000.00

<u>Travel disbursements per district (proven cost)</u>					
36	Amajuba	Prov Sum	1	R 120 000.00	R 120 000.00
37	Harry Gwala	Prov Sum	1	R 150 000.00	R 150 000.00
38	ILembe	Prov Sum	1	R 75 000.00	R 75 000.00
39	King Cetshwayo	Prov Sum	1	R 105 000.00	R 105 000.00
40	Ugu	Prov Sum	1	R 180 000.00	R 180 000.00
41	Umgungundlovu	Prov Sum	1	R 60 000.00	R 60 000.00
42	Umkhanyakude	Prov Sum	1	R 150 000.00	R 150 000.00
43	Umzinyathi	Prov Sum	1	R 660 000.00	R 660 000.00
44	Uthukela	Prov Sum	1	R 120 000.00	R 120 000.00
45	Zululand	Prov Sum	1	R 450 000.00	R 450 000.00
	Total				R 2 070 000.00
SUBTOTAL 5					
TOTAL					
	VAT	%	15%		
TOTAL CARRIED TO FORM OF OFFER					

AMOUNT IN WORDS.....

****NB****

1. The annual unit price will be the applicable (contractual) price per year per item.
2. The total bid price is the price that will be used to evaluate the bid (Adding all the Year 1, 2, and 3 Prices)
3. Bidders must bid as per the price page failing which they will be disqualified.

Required by:

KZN DEPARTMENT OF HEALTH

-At:

Delivery period (on order)

.....

Failure to comply with the above shall invalidate the offer received.

Note: All delivery costs must be included in the bid price, for delivery at prescribed destination.

.....
(Signature of Bidder) Date

.....
(Signature of Witness) Date

SECTION M: PARTICULAR SPECIFICATION

1.1. GENERAL

This Specification shall be read in conjunction with all other sections of the Specification and where there is conflict between requirements this specification shall supersede the conflicting other specification.

The Tenderer is advised to visit the site and acquaint themselves fully with the site conditions and nature and full extent of work involved prior to submitting their tender. Claims on the grounds of insufficient information in such respects or otherwise will not be entertained by the Administration.

The Department of Health reserves the right to make changes to contractual scope and order amount where equipment quoted for at time of Tender and post contract award are realised to be non-functional or out of service.

The Department of Health also reserves the right to not make award of Tender and re-advertise when necessary.

The Department of Health reserves the right to make emergency repairs to keep the equipment in operation without voiding the Contractor's Guarantee, nor relieving the Contractor of his responsibility during the guarantee period when, after proper notice, the Contractor fails to attend to such emergency repairs. All costs incurred by the Administration under these circumstances will be for the account of the Contractor.

1.2. MAINTENANCE AND SERVICING

1.2.1. **Scope**

The scope of contract includes for the servicing, refurbishment and ad hoc repairs for sewer water treatment plants in 10 districts at 60 facilities in the KwaZulu Natal province. The scope includes:

- The service provider will carry out all the risk and responsibility to ensure the sewer water cleaning equipment is up to standard and operating efficiently throughout the agreement.
- Under the preventative maintenance, all costs including travelling, labour, parts and consumables are included.
- Software and hardware upgrades are included
- Minimum stock holding for the parts shall be maintained at all times during the SLA period, in agreement with the parts provider
- DOH Infrastructure shall on its discretion place employees for training purposes
- The service provider shall designate qualified and certified personnel throughout the duration of the contract.
- Labour and travelling for additional technical support staff to assist designated staff (e.g. Technical Manager or other)
- Low-level cleaning.
- Updating of existing manuals and drawings.
- Submit quarterly and annual reports and service certificates.

The purpose of this project is to be implemented in a manner that limited travel is incorporated into the project (travel distance will be capped per district), with a fast response time for call-outs at facilities in 10 districts within KwaZulu Natal, excluding eThekweni district. It is recommended to implement the project through subcontractors where the main contractor at a CIDB grading of 7CE may manage the contract and subcontract the water sewer plants servicing, and refurbishment to their respective number of sub-contractors at a minimum CIDB grading of 2SO.

The appointment of subcontractors will be conducted post-award. The bidders are permitted to procure the plant components and request technical advise from Lilliput Treatment Planst and Components as the Originators and Suppliers of the Patented (2013/06598), Trade Marked (Lilliput®) and Design Registered (A2013/01128) Lilliput Treatment Plants and Components.

1.6.4. SPECIFICATIONS FOR SEWER TREATMENT PLANT COMPONENTS

i. SBC 2000 BT (2KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC2000 BT	1	1				1	1	1	1	1

- Bio Reactor code 3
- Disinfection tank code 5 (Dis 100L)
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- 110 Ø PVC high level overflow from top of pre-digestion to soak away (existing)
- Pre digestion unit. Size to be determined by the engineer to suit plant capacity.
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 12g/day.

Pump from third chamber – balancing / pump sump

- Pre digestion unit: Size to be determined by Engineer to suit plant capacity

ii. SBC 6000 BT (6KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC6000 BT	1	2				1	1	1	1	2

- Plant Capacity to cope with a maximum flow of 6 kilolitres of domestic sewage effluent per day with a raw cod concentration of 600.mg/l.
- Bio Reactor SBC 6 Code 3 with 1.450 Ø
- Two x Disinfection code 5 (Dis 100L)
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- 110 Ø PVC high level overflow from top of pre-digestion to soak away (existing)
- The existing soak away dimension is site specific.
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 36g/day.

Pump from third chamber – balancing / pump sump

- Pre digestion unit: Size to be determined by Engineer to suit plant capacity

iii. SBC 6000 BT CL (6KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC6000 BT	1	2	1			1	1	1	1	2

- Plant Capacity to cope with a maximum flow of 6 kilolitres of domestic sewage effluent per day with a raw cod concentration of 600.mg/l.
- Bio Reactor SBC 6 Code 3 with 1.450 Ø
- Two x Disinfection code 5 (Dis 100L)
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- 110 Ø PVC high level overflow from top of pre-digestion to soak away (existing)
- The existing soak away dimension is site specific.
- Clarifier Code 4 with the diameter 1.5m
- Chlorine Consumption

- Calcium Hypochlorite @ 6 mg/l = 36g/day.

Pump from third chamber – balancing / pump sump

- Pre digestion unit: Size to be determined by Engineer to suit plant capacity

iv. SBC 12000 BT (12KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC12000 BT	1	2				1	1	1	1	2

- Bio Reactor SBC 12 CODE 3 with 1.8m diameter
- Two Disinfection code 5 (260L) with 0.650 diameter
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- 110 Ø PVC high level overflow from top of pre-digestion to soak away (existing)
- The dimension for Optional pump sump manhole and sewer manhole to gravity trunk main are site specific.
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 72g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

v. SBC 12000 BT CL (12KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC12000 BT CL	1	2	1			1	1	1	1	2

- Plant capacity to cope with a maximum flow of 12 Kilolitres of Domestic sewage effluent per day with a raw cod concentration of 600 mg/h.
- Bio Reactor SBC 12 with Diameter of 1.800m
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components.
- Clarifier Code 4 with the diameter 1.5m
- Two Disinfection code 5 (260L) with 0.650 diameter
- Sewer manhole to gravity trunk manhole Dimension is site specific
- 50 Ø PVC discharge from bottom of the clarifier. (Alternatively discharge to drying beds per Engineer's specification and details).
- Chlorine Consumption
 - Calcium Hypochlorite @ 6mg/l = 72g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

vi. SBC12000 BT CL DIS (12KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC12000 BT CL DIS	1	3	1			1	1	1	1	3

- Plant capacity to cope with a maximum flow of 12 Kilolitres of Domestic sewage effluent per day with a raw cod concentration of 600 mg/h.
- Bio Reactor SBC 12 with Diameter of 1.800m
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- Clarifier Code 4 with the diameter 1.5m

- Three Disinfection code 5 (260L) with 0.650 diameter
- Sewer manhole to gravity trunk manhole Dimension is site specific
- 50 Ø PVC discharge from bottom of the clarifier. (Alternatively discharge to drying beds per Engineer's specification and details).
- Chlorine Consumption
 - Calcium Hypochlorite @ 6mg/l = 72g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

vii. SBC 12000 FK CL (12KL)

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC12000 BT CL DIS	1	2	1	1	1	1	1	1	1	2

- Plant capacity to cope with a maximum flow of 12 kilolitres of domestic sewage effluent per day with a raw cod concentration of 600 mg/l.
- Two Pre-digestion 5000litres code 1 with 1.8m Ø diameter
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- Bio rector SBC 12 CODE 3 with 1.90m Ø diameter
- Balancing tank 5000 litres code 2 Ø
- Two Disinfection 260L code 5 with 0.650 Ø
- Chlorine Consumption
 - Calcium Hypochlorite @ 6mg/l = 72g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

viii. SBC 24000 BT CL

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC24000 BT CL	1	2	1			1	1	1	1	2

- Bioreactor SBC 24 code 3 with 2.200 Ø.
- Clarifier code 4 with 1.500 Ø.
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- Two 500 litre Disinfection tanks code 5 with 0.900 Ø.
- 50 Ø PVC discharge from bottom of clarifier. (Alternatively, discharge to drying beds as per engineer's specifications and details).
- Existing gravity sewer trunk main the dimension is site specific.
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 144 g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

ix. **SBC36000 BT CL**

tem	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC36000 BT CL	3	3	1			3	1	3	2	3

- Three Bio-reactors SBC 12 CODE3 with 1.800 Ø
- Three Disinfection code 5 (DIS 500L) with 0.800 Ø
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- Clarifier Code 4 with 1.500 Ø
- 50 Ø PVC discharge from bottom of the clarifier. (Alternatively discharge to drying beds as per engineer's specification and details).
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 216g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.

x. **SBC100000 BT CL**

Item	Bioreactor tower	Disinfectant tank	Clarifier	Predigestion tank (5kl)	Balance tank	Airblower	Discharge Pump	Balance pump	DB Box	Compression rings
SBC100000 BT CL	4	4	1	2	2	4	1	4	3	4

- Four Bio-reactors SBC 12 CODE12 with 1.800 Ø
- Four Disinfection code 5 (DIS 500L) with 0.800 Ø
- 50 Ø HDP connection for gravity sewer pipe to inlet of the treatment plant (2.2 m long minimum, 10 m long maximum) and in between all components
- Clarifier Code 4 with 1.500 Ø
- 50 Ø PVC discharge from bottom of the clarifier. (Alternatively discharge to drying beds as per engineer's specification and details).
- Chlorine Consumption
 - Calcium Hypochlorite @ 6 mg/l = 216g/day.
- Pumps to be sized to suit capacity of incoming effluent duty pump to switch on at low level control switch.