

C4021 - CSIR 3457 PHARMA - WET SERVICES - PRICE BREAKDOWN SCHEDULE - BP
SCHEDULE NO.1 : BP FOUL SEWER DRAINAGE SYSTEM

(Note : These prices shall be firm and not subject to price adjustment)

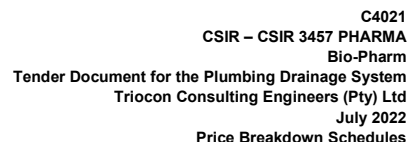
Item	Description	Unit	QTY	Supply Rate	Total Supply	Install Rate	Amount
	Work shall comply with the relevant conditions and installation specifications of SANS 10252-2, manufacturers specifications and local By-laws and Regulations. Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	FOUL SEWER DRAINAGE						
1.1	Supply and install Geberit HDPE, or equal alternative pipe:						
1	40mm pipe	m	4.5				
2	56mm pipe	m	0				
3	63mm pipe	m	31				
4	75mm pipe	m	0				
5	110mm pipe	m	29				
6	50mm-50mm-50mm 45° branch junction	no	0				
7	56mm-56mm-56mm 45° branch junction	no	0				
8	63mm-63mm-40mm 45° branch junction	no	4				
9	63mm-63mm-56mm 45° branch junction	no	1				
10	63mm-63mm-63mm 45° branch junction	no	3				
11	75mm-75mm-63mm 45° branch junction	no	0				
12	110mm-110mm-63mm 45° branch junction	no	4				
12	110mm-110mm-110mm 45° branch junction	no	1				
13	63mm-63mm-63mm-63mm 45° double branch junction	no	1				
14	40mm 45° bend	no	13				
15	50mm 45° bend	no	0				
16	63mm 45° bend	no	23				
17	110mm 45° bend	no	2				
18	40 x 32mm reducer	no	12				
19	50 x 40mm reducer	no	1				
20	63 x 40mm reducer	no	8				
21	110 x 75mm reducer	no	0				
22	110 x 63mm reducer	no	1				
23	56mm rodding eye and cap	no	0				
24	63mm rodding eye and cap	no	5				
25	110mm rodding eye and cap	no	0				
26	75mm screw on stopend & one way vent valve (air admittance valve)	no	2				
27	63mm HDPE Anti-siphon Bottle Trap	no	9				
28	Supply and install new gully	no	0				
29	Connect to existing sewer piping	no	3				
1.2	Test drainage installation.	sum	1				
Total for Schedule No. 1 Carried forward to summary page							R

SCHEDULE NO. 2 : BP COLD WATER PIPING							
(Note : These prices shall be firm and not subject to price adjustment)							
Item	Description	Unit		Supply Rate	Total Supply	Install Rate	Amount
	Work shall comply with the relevant conditions and installation specifications of SANS 10252-1, manufacturers specifications and local By-laws and Regulations. Sub-Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	COLD WATER SUPPLY						
2.1	Supply and install Copper class 2, or equal alternative, pipe (outside diameter):						
1	15mm pipes	m	94				
2	22mm pipes	m	12				
3	28mm pipes	m	12				
2.2	Supply and install DZR Brass fittings:						
1	15mm 90° bend	no	51				
2	22mm 90° bend	no	5				
3	28mm 90° bend	no	5				
4	22 mm x 15 mm reducer	no	9				
5	28 mm x 15 mm reducer	no	4				
6	28 mm x 22 mm reducer	no	1				
6	35 mm x 15 mm reducer	no	1				
7	15 x 15 x 15mm tee junction	no	3				
8	22 x 22 x 22mm tee junction	no	7				
9	28 x 28 x 28mm tee junction	no	4				
2.3	Supply and install valves including threaded capillary fittings for connection to sanitary fixtures, etc. to copper pipe:						
1	15mm stop valve	no	12				
2	22mm stop valve	no	0				
3	Air relieve valve	no	0				
4	Thermostatic Mixing Valve	no	0				
4	25mm Pressure reducing valve with guage	no	1				
5	22mm Non-return valve	no	1				
2.4	Connect to existing water supply pipe	sum	1				
2.5	Testing of complete installed cold water system.	sum	1				
Total for Schedule No. 2 Carried forward to summary page							R

SCHEDULE NO.3 : BP HOT WATER PIPING							
(Note : These prices shall be firm and not subject to price adjustment)							
Item	Description	Unit		Supply Rate	Total Supply	Install Rate	Amount
	Work shall comply with the relevant conditions and installation specifications of SANS 10252-1, manufacturers specifications and local By-laws and Regulations. Sub-Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	HOT WATER SUPPLY AND RETURN						
3.1	Supply and install insulated Copper class 2, or equal alternative, pipe (outside diameter):						
1	15mm pipes	m	63				
2	22mm pipes	m	10				
2	28mm pipes	m	19				
3.2	Supply and install insulated DZR Brass fittings:						
1	15mm 90° bend	no	47				
2	22mm 90° bend	no	15				
3	22 mm x 15 mm reducer	no	5				
4	28 mm x 15 mm reducer	no	3				
5	15 x 15 x 15mm tee junction	no	6				
6	22 x 22 x 22mm tee junction	no	4				
6	28 x 28 x 28mm tee junction	no	0				
3.3	Supply and install valves including threaded capillary fittings for connection to sanitary fixtures, etc. to copper pipe:						
1	15mm stop valve	no	8				
2	15mm Non-return valve	no	1				
3	Air relieve valve	no	2				
4	15mm Strainer	no	1				
4	Globe Valve	no	3				
3.4	Testing of complete installed hot water system.	sum	1				
Total for Schedule No. 3 Carried forward to summary page							R

SCHEDULE NO. 4 : BP HOT WATER GENERATION PLANT							
Item	Description	Unit	QTY	Supply Rate		Install Rate	Amount
	<i>Work shall comply with the relevant conditions and installation specifications of SANS 10252-1, SANS 10254, manufacturers specifications and local By-laws and Regulations. Sub-Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.</i>						
4.1	Hot water generation plant: Procurement, supply, manufacture, delivery to site, storage and installation of:						
1	Heat Pump: KWIKOT c/w a circulating water pump, electronic expansion valve, four-way valve and all associated fittings and consumables required for a fully complete, working system as per layouts..	no	1				
2	Hot Water Geyser: KWIKOT DUAL SUPERLINE 150 litre c/w 3kW backup elements, electrical connecton, drip tray and electric water heater blanket and all associated fittings and consumables required for a fully complete, working system.	no	1				
3	Circulation Pump: 0,009 kW Lowara ecocirc PRO 15-1/110 U or Equal	no	1				
4	All copper class 2 pipework and fittings - insulation, valves, y-strainers, pump fittings, pressure gauges etc. as per the concept design drawings for a complete and fully functioning hot water installation.	sum	1				
5	Bluechem corrosion protection for heat pump	no	1				
6	Instantaneous Water Boiler with connection and fittings	no	1				
4.2	All other equipment, not listed, required for a fully working complete system.	sum	1				
Total for Schedule No. 4 carried forward to summary page						R	

SCHEDULE NO. 5 : BP GENERAL ITEMS							
Item	Description	Unit	QTY	Supply Rate		Install Rate	Amount
1	Complete set of operation manuals and as-built drawings	sum	1				
2	Install and connect the emergency shower (supplied by others)	sum	0				
3	Connection of water supply to the following fittings:						
3.1	Laboratory double sink	sum	0				
3.2	Laboratory single sink	sum	1				
3.3	Wash hand basin	sum	2				
3.4	Eye showers	sum	2				
4	Connection of bottle traps and drainage to the following fittings:						
4.1	Laboratory double sink	sum					
4.2	Laboratory single sink	sum	1				
4.3	Wash hand basin	sum	2				
5	12 month maintenance	sum	1				
Total for Schedule No. 5 carried forward to summary page						R	



Item	Description	Unit	Rate	Amount			Sub-Total
	PLUMBING AND DRAINAGE INSTALLATION						
A	Price Breakdown Schedules No. 1 TO 5						
	Subtotal						
	Provisional Amounts for :						
B							
C							
D							
E							
	Subtotal for B+C+D+E						
	TOTAL NET CONTRACT SUM (excl vat)						
						R	

- 2 All the rates in this document must be supplied.**

C4021 - CSIR 3457 PHARMA - WET SERVICES - PRICE BREAKDOWN SCHEDULE - SMF

SCHEDULE NO.1 : SMF FOUL SEWER DRAINAGE SYSTEM

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit	QTY	Supply Rate	Total Supply	Install Rate	Amount
	<i>Work shall comply with the relevant conditions and installation specifications of SANS 10252-2, manufacturers specifications and local By-laws and Regulations. Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.</i>						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	FOUL SEWER DRAINAGE						
1.1	Supply and install Geberit HDPE, or equal alternative pipe:						
1	40mm pipe	m	7.5				
2	56mm pipe	m	0				
3	63mm pipe	m	40				
4	75mm pipe	m					
5	110mm pipe	m	67				
6	50mm-50mm-50mm 45° branch junction	no	0				
7	56mm-56mm-56mm 45° branch junction	no	0				
8	63mm-63mm-40mm 45° branch junction	no	10				
9	63mm-63mm-56mm 45° branch junction	no	0				
10	63mm-63mm-63mm 45° branch junction	no	6				
11	75mm-75mm-63mm 45° branch junction	no	0				
12	110mm-110mm-63mm 45° branch junction	no	4				
13	110mm-110mm-110mm 45° branch junction	no	7				
14	63mm-63mm-63mm-63mm 45° double branch junction	no	0				
15	40mm 45° bend	no	12				
16	50mm 45° bend	no					
17	63mm 45° bend	no	50				
18	110mm 45° bend	no	16				
19	40 x 32mm reducer	no	14				
20	63 x 40mm reducer	no	10				
21	75 x 63mm reducer	no	0.000				
22	110 x 63mm reducer	no	0				
23	56mm rodding eye and cap	no	0				
24	63mm rodding eye and cap	no	7				
25	75mm rodding eye and cap	no	0				
26	75mm screw on stopend & one way vent valve (air admittance valve)	no	0				
27	63mm HDPE Anti-siphon Bottle Trap	no	19				
28	Supply and install 1000L sludge tank complete with level switch required in grease trap in order to activate pump, include all required valves for pump installation.	no	1				
29	Connect to existing sewer piping	no	3				
1.2	Test drainage installation.	sum	1				
Total for Schedule No. 1 Carried forward to summary page							R

SCHEDULE NO.2 : SMF COLD WATER PIPING

(Note : These prices shall be firm and not subject to price adjustment)

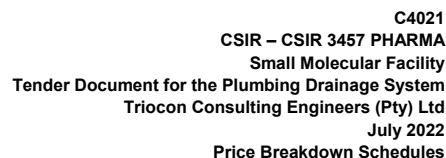
Item	Description	Unit		Supply Rate	Total Supply	Install Rate	Amount
	Work shall comply with the relevant conditions and installation specifications of SANS 10252-1, manufacturers specifications and local By-laws and Regulations. Sub-Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	COLD WATER SUPPLY						
2.1	Supply and install Copper class 2, or equal alternative, pipe (outside diameter):						
1	15mm pipes	m	60				
2	22mm pipes	m	45				
3	28mm pipes	m	4				
4	35mm pipes	m	19				
2.2	Supply and install DZR Brass fittings:						
1	15mm 90° bend	no	58				
2	22mm 90° bend	no	26				
3	22 mm x 15 mm reducer	no	25				
4	28 mm x 22 mm reducer	no	3				
5	35 mm x 15 mm reducer	no	3				
6	35 mm x 22 mm reducer	no	4				
7	35 mm x 28 mm reducer	no	1				
8	15 x 15 x 15mm tee junction	no	9				
9	22 x 22 x 22mm tee junction	no	13				
10	28 x 28 x 28mm tee junction	no	1				
11	35 x 35 x 35mm tee junction	no	5				
2.3	Supply and install valves including threaded capillary fittings for connection to sanitary fixtures, etc. to copper pipe:						
1	15mm stop valve	no	17				
2	22mm stop valve	no	8				
3	Air relieve valve	no	0				
4	Thermostatic Mixing Valve	no	2				
4	25mm Pressure reducing valve with guage	no	0				
5	35mm Non-return valve	no	1				
2.4	Connect to existing water supply pipe	sum	1				
2.5	Testing of complete installed cold water system.	sum	1				
Total for Schedule No. 2 Carried forward to summary page							R

SCHEDULE NO.3 : SMF HOT WATER PIPING

(Note : These prices shall be firm and not subject to price adjustment)

Item	Description	Unit		Supply Rate	Total Supply	Install Rate	Amount
	Work shall comply with the relevant conditions and installation specifications of SANS 10252-1, manufacturers specifications and local By-laws and Regulations. Sub-Contractor shall issue a certificate of compliance in terms of local By-laws upon completion. All works, equipment and practices shall be SABS compliant and equipment stamped as such.						
	Rates shall include allowance for fixings and bracketing of piping reticulation to walls and soffits.						
	HOT WATER SUPPLY AND RETURN						
3.1	Supply and install insulated Copper class 2, or equal alternative, pipe (outside diameter):						
1	15mm pipes	m	131				
2	22mm pipes	m	15				
3	28mm pipes	m	0				
3.2	Supply and install insulated DZR Brass fittings:						
1	15mm 90° bend	no	25				
2	22mm 90° bend	no	5				
3	22 mm x 15 mm reducer	no	3				
4	28 mm x 15 mm reducer	no	4				
4	28 mm x 22 mm reducer	no	4				
6	15 x 15 x 15mm tee junction	no	2				
7	22 x 22 x 22mm tee junction	no	3				
8	28 x 28 x 28mm tee junction	no	5				
3.3	Supply and install valves including threaded capillary fittings for connection to sanitary fixtures, etc. to copper pipe:						
1	15mm stop valve	no	6				
2	22mm stop valve	no	3				
2	15mm Non-return valve	no	0				
3	Air relieve valve	no	0				
4	15mm Strainer	no	0				
5	Globe Valve	no	1				
3.4	Testing of complete installed hot water system.	sum	1				
Total for Schedule No. 3 Carried forward to summary page							R

SCHEDULE NO. 4 : SMF GENERAL ITEMS							
Item	Description	Unit	QTY	Supply Rate		Install Rate	Amount
1	Complete set of operation manuals and as-built drawings	sum	1				
2	Install and connect the emergency shower (supplied by others)	sum	2				
3	Connection of water supply to the following fittings:						
3.1	Laboratory double sink	sum	2				
3.2	Laboratory single sink	sum	0				
3.3	Wash hand basin	sum	4				
3.4	Eye showers	sum	3				
4	Connection of bottle traps and drainage to the following fittings:						
4.1	Laboratory double sink	sum	2				
4.2	Laboratory single sink	sum	4				
4.3	Wash hand basin	sum					
5	12 month maintenance	sum	1				
Total for Schedule No. 4 carried forward to summary page							R

[illegible]

1 Above Total Net contract sum to be carried forward to Principal Contract Form of Tender contained in this document.



Wet Services Bills of Quantities

**Bill
No**

Amount

5.7 Wet Services Bills of Quantities

R

Main Contractors percentage for all mark-ups,
attendance, etc on specialist domestic contractor

R

Carried Forward To Section 5.10 : Final Summary

R

-

CSIR Future PHARMA Facility