ANNEXURE C2.2 – PRICING SCHEDULE / BILL OF QUANTITIES

RW10392896/25R

THE PRICING SCHEDULE
Based on Annexure B and proposed solution design for Rand Water
Note: Excluding VAT and in ZAR

PUBLIC CLOUD

INFRASTRUCTURE as a Service

PRIMARY - PRODUCTION - Resources							
Resource	**Quantity**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Cost (5 years)**
Production VMs	124						
TOTAL							

Table 1

HIGH AVAILABILITY - PRODUCTION - Resources							
Resource	**Quantity**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Cost (5 years)**
Critical VMs	39						
TOTAL							

Table 2

DEVELOPMENT AND QA - Resources

Resource	Quantity	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Development VMs	26						
Quality and Assurance VMs	18						
TOTAL							

Table 3

BACKUP as a Service

BACKUP - Storage

Resource	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Production (critical and non-critical)						
Development						
Quality and Assurance						
TOTAL						

Table 4

Disaster Recovery as a Service

DISASTER RECOVERY - Storage

Resource	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)

Production (Critical and non-critical)					
Development					
Quality and Assurance					
DR Drill (Quarterly)					
TOTAL					

Table 5

NETWORK

Networking				
Resource	**Quantity**	**Unit Cost**	**Total cost (per year)**	**Total Cost (5 years)**
Redundant 5GE Physical links (Fibre)	2			
Ports	2			
Cross connect		2		
Public Cloud network data charges (between Availability Zones)		1GB		Null
Ingress		1GB		Null
Egress		1GB		Null
TOTAL				

Table 6

Security

Security - Services						
Resource	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Cost (5 years)**
Asset Security, Host Security, Web Application Security. etc						
TOTAL						

Table 7

Software

Virtualization and licences

VIRTUALIZATION – Software					
Item	**Specification**	**Unit**	**Quantity**	**Unit Cost**	**Total Cost (5 years)**
Cloud Foundation Virtualization Platform	**Cloud Virtualization License**	**Per Package**			
Unified Cloud Management Platform	**Unified Cloud Management Platform License**	**Per Package**			
Windows Licenses			**Rand Water to provide**		
Unix Linux Licenses			**Rand Water to provide**		
Client Access Licenses (CALs)		3500			
Additional software licences					
TOTAL					

Table 8

FROM PRIVATE CLOUD

Backup

Excluding licences

BACKUP - Storage						
Resource	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Cloud Backup Storage (From On-premises to Public Cloud)						
Reporting (Monthly)						
TOTAL						

Table 9

Disaster Recovery

Excluding licences

DISASTER RECOVERY - Storage						
Resource	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Cloud Backup Storage (From On-premises to Public Cloud)						
DR Drill (Quarterly)						
TOTAL						

Table 10

PRIVATE CLOUD

Hardware

All pricing must make include 5 years maintenance

SERVERS - Hardware					
Item	Specification	Unit	Quantity	Unit Cost	Total Cost (5 years)
Network Node	2*24 Core CPU, 16*32 GB Memory, 1 Raid card, 2 Riser card	Per device	3		
Management Node	2*24 Core CPU, 24*32 GB Memory, 1 Raid card, 1 Riser card	Per device	7		
Compute Node	2*24 Core CPU, 8*32 GB Memory, 1 Raid card, 2 Riser card	Per device	16		
Additional Servers					
TOTAL					

Table 11

STORAGE - Hardware					
Item	Specification	Unit	Quantity	Unit Cost	Total Cost (5 years)
Product Distributed Storage	3.84TB SSD SAS Disk*12	Per device	3		
Additional storage					
TOTAL					

Table 12

NETWORK - Hardware					
Item	Specification	Unit	Quantity	Unit Cost	Total Cost (5 years)
Network Leaf	48*10G SFP+, 6*100G QSFP28	Per device	2		
Compute/ Storage Node Leaf	48*10G SFP+, 6*100G QSFP28	Per device	2		
External access TOR	48*10G SFP+, 6*100G QSFP28	Per device	2		
Management Leaf	48*10G SFP+, 6*100G QSFP28	Per device	2		
Management Firewall	8*GE COMBO + 4*GE RJ45 + 10*10GE SFP	Per device	2		
Core Switch	64-Port 100GE QSFP28	Per device	2		
BMC switch	48*GE RJ45, 4*10GE SFP	Per device	2		
Compute Node	2*24 Core CPU, 8*32 GB Memory, 1 Raid card, 2 Riser card	Per device	16		
TOTAL					

Table 13

Software

Virtualization and licences

VIRTUALIZATION – Software					
Item	**Specification**	**Unit**	**Quantity**	**Unit Cost**	**Total Cost (5 years)**
Cloud Foundation Platform	**Cloud Virtualization License**	**Per Package**			
Unified Cloud Management Platform	**Unified Cloud Management Platform License**	**Per Package**			
Windows Licenses			**Rand Water to provide**		
Unix Linux Licenses			**Rand Water to provide**		
Client Access Licenses (CALs)		300			
Additional software licences					
TOTAL					

Table 14

Backup

Software. This exclude public cloud storage

BACKUP - Software								
Item	**Specification**	**Quantity**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total Cost (5 years)**
Cloud Backup (From On-premises to Public Cloud)	**Cloud Backup Software**							
Reporting (Monthly)		12						
TOTAL								

Table 15

Disaster Recovery

Software. This exclude public cloud storage

DISASTER RECOVERY - Software

Item	Specification	Quantity	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Cloud Disaster Recovery Service (From On-premises to Public Cloud)	**Disaster Recovery Software**							
TOTAL								

Table 16

Security

Security - Software

Item	Year 1	Year 2	Year 3	Year 4	Year 5	Total Cost (5 years)
Asset Security, Host Security, Web Application Security. etc						
TOTAL						

Table 17

Professional services

Platform operations, Infrastructure and Environment Support

Service	Specification	Year 1	Year 2	Year 3	Year 4	Year 5	Total cost (5 Years)
Public Cloud	Enterprise						
Private Cloud	Enterprise						
Additional support							
TOTAL							

Table 18

Implementation, Design and Delivery

			Total Cost
Public Cloud	Cloud Migration Tools	Once-off	
	VM & Data Migration Implementation	Once-off	
	Training	10 Rand Water engineers	
	Design, Planning, Implementation of Public Cloud	Once-off	
Additional Service			
Private Cloud	Cloud Migration Tools	Once-off	
	VM & Data Migration Implementation	Once-off	
	Training & Certification	10 Rand Water engineer	
	Design, Planning, Implementation of Private Cloud	Once-off	
Additional Services			
TOTAL			

Table 1

THE PRICING SCHEDULE SUMMARY
Total Cost (5 years)

Item	Table	Pricing Descriptions	ZAR Total Price excl. VAT
PUBLIC CLOUD	1	Primary Production	
	2	High Availability - Production	
	3	Development and QA	
	4	Backup as a Service	
	5	Disaster Recovery as a Service	
	6	Network	
	7	Security	
	8	Virtualization and Licences	
Excluding licences	9	Backup	
	10	Disaster Recovery	
Total			
PRIVATE CLOUD	11	Servers	
	12	Storage	
	13	Network	
	14	Virtualization and Licences	
	15	Backup	
	16	Disaster Recovery	
	17	Security	
Total			
Professional services	18	Platform Operations, Infrastructure and Environment Support	
	19	Implementation, Design and Delivery	
		Additional/Adhoc	
Total			
Sub-Total Cost. Excl VAT (5 years)			
VAT			
Total Cost. Incl VAT (5 years)			