

SECTION 4

PORT SHEPSTONE HOSPITAL NEW PSYCHIATRIC WARD (WIMS 044044)

AUTOMATIC FIRE SPRINKLER INSTALLATION

BILL OF QUANTITIES

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Department:
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PROVINCE OF KWAZULU-NATAL

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AUTOMATIC SPRINKLER PROTECTION INSTALLATION: BILL OF QUANTITIES
PORT SHEPSTONE PSYCH WARD (WIMS 044044)

BILL NO. 3 : AUTOMATIC SPRINKLER PROTECTION INSTALLATION

ITEM NO	DESCRIPTION	UNIT	QTY.	RATE (R/c)	AMOUNT (R/c)
1,0	NOTES:				
1,1	All prices for equipment shall be for supply and final fixing in place.				
1,2	Descriptions of equipment herein shall be read and priced in conjunction with the specification and drawings forming part of the tender documentation				
1,3	Rates filled in below per item, must allow for all costs, whether such item is described fully or not, such that price for all works is allowed for to ensure full compliance with specifications and that a fully functional installation is installed and handedover.				
1,4	Rates must allow for wastage were applicable.				
1,5	This bill shall not be used for ordering material.				
1,6	rates per metre of piping shall include for bends, tees, nipples, reducers, bushes, hangers, support brackets, painting, etc.				
1,7	Piping, and fittings downstream off indicated design point shall be included in rate per head.				
1,8	Where piping is included in rates per head, those rates shall include for bends, tees, nipples, reducers, bushes, hangers, support brackets, painting, etc.				

ITEM NO		UNIT	Qty	RATE	AMOUNT
2,0	PUMPS, TANKS AND ASSOCIATED WORKS				
2,1	Electric Driven Sprinkler Fire Pump	No.	2		
2,2	Electrically Driven Jockey Pump	No.	1		
2,3	Control panel/alarm panel, complete with field cabling for complete sprinkler system	No.	1		
2,4	Electrical field cabling between all remote equipment (flow switches, valve monitoring switches, alarm panel, etc.,) and pump room control panel	-	-	sum	
2,5	All associated pipe-work, fittings and materials within and around the pump and tank room, including, in-fill pipe, level control valves, isolating valves, in-fill baffles, vortex inhibitors, auto start arrangement, suction/ delivery pipe work, control equipment, painting, pump cooling water piping, etc. - flanged municipal supply will be provided by others within 10m from tank connection on plan	-	-	sum	
2,6	Supply and installation of ABECO or similar and approved ((2.44 x 15.86 x 2.44 (H)) + (1.22 x 4.88 x 2.44 (H)) = 99kL), complete with fixed ladders, platform, Inlets and outlets, level indicator, access hatch. (ASIB 12th edition specification)	No.	1		
2,7	Supply and installation of ABECO or similar and approved (3,66 x 8,54 x 2.44 (H) = 70kL), complete with fixed ladders, platform, Inlets and outlets, level indicator, access hatch. (ASIB 12th edition specification)	No.	1		
2,7	Box with spares, associated signage block plans, instruction sheets, etc.. at valve station	No.	1		
2,8	Signage, block plans, instruction sheets, etc., at pump room	No.	1		
Total carried forward to summary page:					R

ITEM NO		UNIT	Qty	RATE	AMOUNT
3,0	SPRINKLER INSTALLATION				
3,1	Medium Black Steel sprinkler mains complete with fittings, bends, tees,bellows, strainers, isolating valves, check valves, vortex inhibitor,etc., and painted with <u>2</u> coats primer and <u>1</u> x coat of gloss undercoat and 1 x overcoat				
a.	100mm dia. sprinkler mains run from pump discharge to valve station (Point A-B)	m	60		
b.	100mm dia. sprinkler main distribution pipe from sprinkler valve station to design point in plantroom (B-C.) All other distribution pipe, risers, droppers and all range pipes measured as rate per head and priced elsewhere) - Refer to drawing attached	m	100		
c.	150mm dia. sprinkler main suction piping from tanks to pump suction	m	20		
3,2	Sprinkler valve station complete with associated equipment including piping, fittings, booster coupling connections, alarm valves, isolating valves, test valve, alarm gong, orifice pressure/flow test facility painting, block plan etc.				
a.	100mm diameter valve station with 80mm diameter test lea complete with orifice plate	No.	1		
Total carried forward to Summary Page					R

ITEM NO		UNIT	Qty	RATE	AMOUNT
3,3	Sprinkler installation including all piping from distribution pipes to sprinkler heads complete with supports, painting, fittings, heads, etc.				
a.	under slab sprinkler protection reticulation in basement parking level for 5 mm/min density (144sq/m A.O.O.) of discharge, with 15mm fast response type upright sprinkler heads for 68deg.C (brass heads)	No.	320		
b.	Ceiling mounted sprinklers (no void sprinklers) for 5mm/ min. density with 15mm white semi recessed sprinkler heads and rosettes	No.	20		
3,4	Grooved victaulic flexible couplings for piping across expansion joints - 100mm diameter	No.	8		
4,0	<i>All additional items/costs, which the Tenderer considers essential to complete the installation including design materials, fabrication, delivery, testing and commissioning(etc) Note: All items costed here must be detailed hereunder</i>	-	-	sum	
Total carried forward to Summary Page					R

ITEM NO		UNIT	Qty	RATE	AMOUNT
5,0	GENERAL				
5,1	Allowance for associated costs to comply with conditions of contract (including but not limited to insurances, securities, site establishment, site attendance, etc.) - shall be paid in equal amounts over the contract period	-	-	sum	
5,2	Preparation of shop and builder's works drawings	-	-	sum	
5,3	Rigging and haulage	-	-	sum	
5,4	Scaffolding	-	-	sum	
5,5	Testing, Commissioning and Handover	-	-	sum	
5,6	A.S.I.B inspections and certification	-	-	sum	
5,7	Operating and maintenance manuals complete with hydraulic calculations and as built drawings with soft copy on flash drive	No.	1		
5,10	Operating and maintenance manuals complete with as built drawings - additional copies with soft copies	No.	3		
5,11	12 month guarantee and maintenance	-	-	sum	
5,12	Compliance with Health and Safety Act	-	-	sum	
5,13	Provision of electrical compliance certificate	-	-	sum	
5,14	Contingency - expended only on Engineer's instructions			sum	R 85 000,00
Total excluding Value Added Tax (carried forward to Tender Form)					R

ITEM NO		UNIT	Qty	RATE	AMOUNT
SUMMARY PAGE: SPRINKLER SYSTEMS					
	Sub total brought forward from Page F-B2			R	
	Sub total brought forward from Page F-B3			R	
	Sub total brought forward from Page F-B4			R	
	Sub total brought forward from Page F-B5			R	
Total excluding Value Added Tax (carried forward to Tender Form)					R