



REQUEST FOR QUOTATION

Transnet SOC Limited
T/A Transnet Capital Projects

TFR RME RFQ BOARD
TRANSNET FREIGHT RAIL RME
XXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

Registration Number: 1990/000900/06
Vat Number : 4720103177

REQUEST for QUOTATION
Transnet Capital Projects
RFQ Number / Date
6000169647 / 05.08.2013
Contact Person / Telephone
Anne Mongie / 031 361 1759
Return to VAX Number/EMAIL
0318300001 / TCPtendersDurban@Transnet.net

Attention:
TFR RME RFQ BOARD
Telephone Number :
Fax Number :
Vendor Number :500000

Quotation Deadline Date : 15.08.2013
Quotation Deadline Time : 16H00

"PREVIEW COPY ONLY"

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
100010		SUPPLY AND DELIVER CONT	1	Ac	26.08.2013			

SUPPLY AND DELIVER CONTROL VALVES AS PER ATTACH SPECIFICATION.

SUPPLIER TO PERUSE THE SPECIFICATION FOR VALVE DETAILS ON EACH OF THE ABOVE

NOTE IT IS COMPULSURY TO COMPLETE ALL THE FIELDS IN THE DATA SHEETS IN ORDER TO EVALUATE YOUR TENDERS

NOTE: SEAT AND SEALS SHALL BE NBR.

NOTE: ELASTOMERS AND O-RINGS SHALL BE NBR.

SUPPLIER TO PROVIDE TEST CERTICATES AND COPY OF SPECIFICATIONS SPECIFIED

FOR ALL TECHNICAL QUERIES CALL PIET ON 0832582063
FOR ALL PROCUREMENT RELATED QUERIES CALL :
ANNE ON 031 361 1759 E-MAIL : anne.mongie@transnet.net

CLOSING DATE FOR QUOTES : 15 AUGUST 2013 AT 16H00.



REQUEST FOR QUOTATION

Transnet SOC Limited
 T/A Transnet Capital Projects
 TFR RME RFQ BOARD
 TRANSNET FREIGHT RAIL RME
 XXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXX
 0000

Registration Number: 1990/000900/06
 Vat Number : 4720103177

REQUEST for QUOTATION
 Transnet Capital Projects
RFQ Number / Date
 6000169647 / 05.08.2013
Contact Person / Telephone
 Anne Mongie / 031 361 1759
Return to VAX Number/EMAIL
 0318300001 / TCPtendersDurban@Transnet.net

Attention:
 TFR RME RFQ BOARD
 Telephone Number :
 Fax Number :
 Vendor Number :500000

Quotation Deadline Date : 15.08.2013
Quotation Deadline Time : 16H00

"PRELIMINARY COPY ONLY"

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
------	----------	-------------	---------	-----	-------------------	------------------	-----------------	------------------

QUOTES MUST BE SENT TO ONE OF THE CONTACTS ON THE RFQ AND NOT MAILED TO THE BUYER.
 ATTACH COPIES OF BBBEE AND TAX CLEARANCE CERTIFICATES TO QUOTES.

The item covers the following services:

10	2 EA	DIA.200MM (PVC1)
20	1 EA	DIA. 200MM(PVC2)
30	1 EA	DIA.150MM (PVC 3)



REQUEST FOR QUOTATION

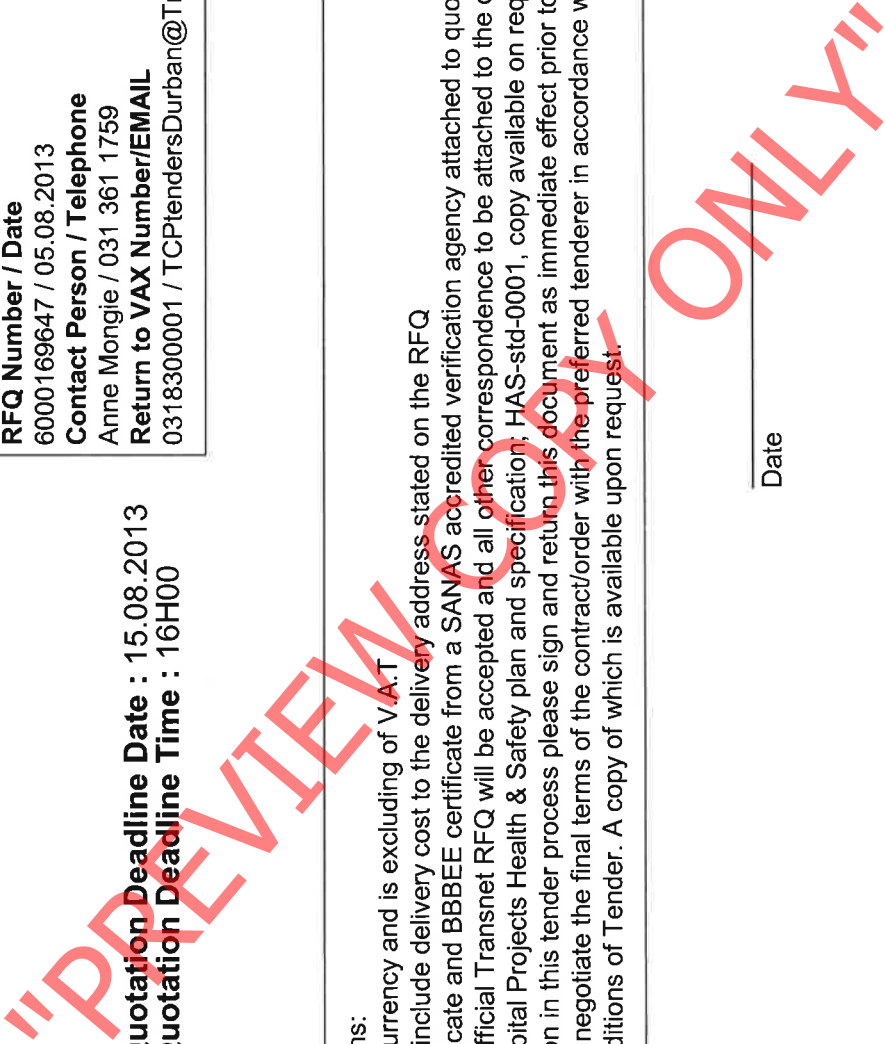
Transnet SOC Limited
 T/A Transnet Capital Projects
 TFR RME RFQ BOARD
 TRANSNET FREIGHT RAIL RME
 XXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXX
 0000

Registration Number: 1990/000900/06
 Vat Number : 4720103177

REQUEST for QUOTATION
 Transnet Capital Projects
RFQ Number / Date
 6000169647 / 05.08.2013
Contact Person / Telephone
 Anne Mongje / 031 361 1759
Return to VAX Number/EMAIL
 0318300001 / TCPtendersDurban@Transnet.net

Attention:
 TFR RME RFQ BOARD
 Telephone Number :
 Fax Number :
 Vendor Number :500000

Quotation Deadline Date : 15.08.2013
Quotation Deadline Time : 16H00



Delivery Address

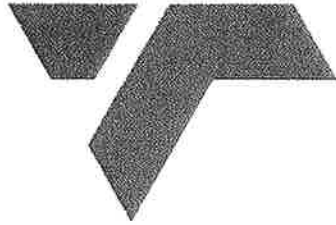
This RFQ is subject to the following conditions:

1. Price/s : The price/s quoted in SA currency and is excluding of V.A.T
2. Delivery : The price/s quoted should include delivery cost to the delivery address stated on the RFQ
3. Returnables : A valid tax clearance certificate and BBBEE certificate from a SANAS accredited verification agency attached to quotation for all quotes above R30 000.
 Please note that only the official Transnet RFQ will be accepted and all other correspondence to be attached to the original
4. Safety : To confirm to Transnet Capital Projects Health & Safety plan and specification; HAS-std-0001, copy available on request.
5. Confirmation: To confirm your participation in this tender process please sign and return this document as immediate effect prior to the quotation deadline.
6. Negotiations: The Employer may elect to negotiate the final terms of the contract/order with the preferred tenderer in accordance with Clauses F.2.17 and F.3.13 of the CIDB Standard Conditions of Tender. A copy of which is available upon request.

Signature _____

Date _____

TRANSNET

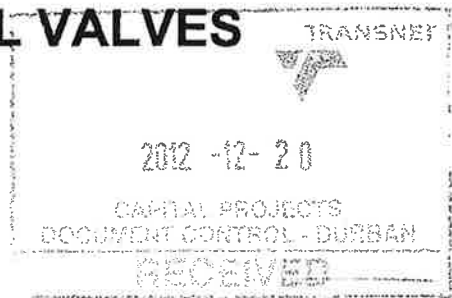


*national ports
authority*

**PROJECT NEW FIRE PUMPS AT BERTH 9
ISLAND VIEW**

SUPPLY OF CONTROL VALVES

MARCH 2012



K&T PROJECT REFERENCE: 16268-TD-SD-04

Name of Tenderer:



KANTEY & TEMPLER (PTY) LTD
CONSULTING ENGINEERS
REG. NO. 1966/09839/07

TEL: 031 266 6535
FAX: 031 266 5786
WEB: www.kanteys.co.za
E-MAIL: ktdbn@dbn.kanteys.co.za
P O BOX 1621, WANDSBECK, 3631

Engineering African Development

TRANSNET CAPITAL PROJECTS

BERTH 9 FIRE PUMPS

SUPPLY OF CONTROL VALVES

TENDER DOCUMENT

THIS DOCUMENT CONSISTS OF THE FOLLOWING SECTIONS:

- A. CONDITIONS OF TENDER
 - B. PROJECT SPECIFICATIONS
 - C. SCHEDULE OF QUANTITIES
- APPENDIX A: ALTERATIONS BY TENDERER
- APPENDIX B: PCV1 DATA SHEET
- APPENDIX C: PCV2 DATA SHEET
- APPENDIX D: PCV3 DATA SHEET

"PREVIEW COPY ONLY"

TRANSNET CAPITAL PROJECTS

BERTH 9 FIRE PUMPS

SUPPLY OF CONTROL VALVES

TENDER DOCUMENT

SECTION A

CONDITIONS OF TENDER

C O N T E N T S

- 1 DOCUMENTS
- 2 SITE INSPECTION
- 3 FURTHER INFORMATION

"PREVIEW COPY ONLY"

TRANSNET CAPITAL PROJECTS

BERTH 9 FIRE PUMPS

SUPPLY OF CONTROL VALVES

TENDER DOCUMENT

SECTION A

CONDITIONS OF TENDER

1. **DOCUMENTS:**

Tenderers shall check that they have been provided with all documents and drawings and advise the Engineer immediately if there is any doubt as to the meaning of any word, clause, sentence, paragraph, drawing or any other particulars whereupon the Engineer may change same to reflect the correct situation.

All documents and drawings remain the property of Kantey and Templer and are to be returned by the tender closing date, whether a tender is submitted or not. Failure to comply with this requirements will result in prosecution in terms of the Protection of Information Act.

2. **SITE INSPECTION**

No Site inspection is required, however should the supplier wish to view the site this can be arranged at the tendering companies cost, and no price variations will be accepted after tender due to site conditions.

3. **FURTHER INFORMATION**

Further information may be obtained from Clifford Ireland, Kantey and Templer, Tel (031) 266 6535, Fax (031) 266 5786. All enquiries in connection with the tender and replies thereto will be IN WRITING. Any information conveyed to a tenderer as a result of such further enquiries will be advised to all tenderers if it is considered that such enquiry may in any way affect the tenders of others.

TRANSNET CAPITAL PROJECTS

BERTH 9 FIRE PUMPS

SUPPLY OF CONTROL VALVES

TENDER DOCUMENT

SECTION B

PROJECT SPECIFICATION

PS 1	INTENT OF SPECIFICATIONS
PS 2	SCOPE OF TENDER / CONTRACT
PS 3	DETAILS TO BE INCLUDED IN TENDER DOCUMENT
PS 4	DESCRIPTION OF OPERATION
PS 5	CERTIFICATION AND DOCUMENTATION
PS 6	CORROSION PROTECTION
PS 7	INSPECTION AND TESTING
PS 8	REJECTIONS

"PREVIEW COPY ONLY"

PS 1 **INTENT OF SPECIFICATIONS**

The specifications are intended to delineate standards and practices which will lead to the production of an efficient, durable and cost effective facility that will meet all the requirements for which it is intended and which will conform to all statutory requirements and norms in the industry. All specification clauses shall be read and deemed to apply to the items described in the Schedule of Quantities which are priced accordingly.

In all dealings, the supplier shall have the best interests of the end user in mind and shall act accordingly, offering advice and opinions where necessary. The workmanship shall be of the highest quality throughout.

The Engineer shall have the sole right to determine the quality of the materials and workmanship and technical ability of the supplier, and anything which may, in the opinion of the Engineer, be inferior to that specified for the work will be condemned. All condemned material and workmanship must be replaced or rectified, as the case may be, at no cost, to the satisfaction of the Engineer.

PS 2 **SCOPE OF TENDER / CONTRACT**

The scope of this contract includes the following:

- The supply of 2No. Pressure Sustaining Valves with Check valve feature (PCV1) for fire pumps protection.
- The supply of 1 No. Pressure Sustaining Valve (PCV2) with the Orifice plate (to balance pressure drop across the PCV2) for the ring main return line to the water tank.
- The supply of 1 No. Reservoir (Float) Valve (PCV3) for the water tank filling control.
- The delivery to site, Berth 9 Island View, Durban, South Africa, of the above control valves and offloading at the contractors designated site facility to site. The driver will be required to attend a visitor's induction prior to offloading.
- Assistance with the commissioning of the valves on site after installation.
- The provision of the prescribed quality control and operations documentation.

PS 3 **DETAILS TO BE INCLUDED IN TENDER DOCUMENT**

For the purposes of this contract all units shall be in accordance with the SI system. **No other units shall be accepted.**

The Tenderer shall submit with this Tender for each valve offered the following:

- Make and model number
- Dimensioned drawings indicating overall dimensions
- Materials of construction
- Anticipated delivery period from date of order.

Any Deviations from the Specification in the Tender Document.

The attached Schedule of Quantities shall be completed. Where alternatives are offered, the Schedule and data sheets are to be duplicated for each offer made.

IMPORTANT NOTE: No other priced Schedule will be accepted, and should any of the above information be missing, the Engineer reserves the right to reject the Tender in its entirety.

PS 4 DESCRIPTION OF OPERATION

PS 4.1 PRESSURE SUSTAINING VALVES (PCV1) FOR FIRE PUMPS 2

The PCV1 maintains a constant preset upstream pressure regardless of changing upstream potential and system demand (flow rate). The PCV1 needs to be equipped with a pressure sustaining pilot valve with adjustable spring load, normally closed diaphragm valve with remote upstream pressure sensing.

16268 P01
SMT 3 (11)

Should the upstream pressure drop to sustaining pilot setting, pilot tends to close causing main valve to close.

Should the pressure conditions reverse i.e. when inlet pressure exceeds outlet pressure, the upstream check valve closes, downstream check valve opens, directing higher outlet pressure into the valve control chamber and main valve positively closes.

OPERATION

Valve pressure differential powers the diaphragm actuator to operate the valve. Lower control chamber is connected through a fixed orifice to downstream pressure; it serves as a cushioning for smooth operation. Upper control chamber has varying pressure produced by pilot modulation opening in conjunction with upstream restriction needle valve.

Deviations from the above shall be clearly indicated in the Alterations by Tenderer.

PS 4.2 PRESSURE SUSTAINING VALVE (PCV2) FOR RETURN LINE TO WATER TANK

16268-P02
SMT 1 (5)

The PCV2 maintains a constant preset upstream pressure regardless of changing upstream potential and system demand. The PCV2 is to be equipped with a pressure sustaining pilot valve with adjustable spring load, normally closed diaphragm valve with remote upstream pressure sensing.

It should operate in the principle that if upstream pressure exceed to sustaining pilot setting, pilot tends to open causing main valve to open and release water to the dry line feeding back to the reservoir. It should be noted that the PCV2 will be discharging to the dry open line back to reservoir, hence the orifice plate to balance pressure drop across the PCV2 should be supplied.

The supplier is to supply a suitable orifice plate for pressure balance across the valve and provide installation guidelines.

OPERATION

Valve pressure differential powers the diaphragm actuator to operate the valve. Lower control chamber is connected through a fixed orifice to downstream pressure; it serves as a cushioning for smooth operation. Upper control chamber has varying pressure produced by pilot modulation opening in conjunction with upstream restriction needle valve.

PS 4.3 RESERVOIR (FLOAT) VALVE (PCV3) FOR THE WATER TANK FILLING CONTROL

16268-P03
SMT 1 (5)

The basic operation of PCV3 will entail maintaining a constant upper level control of water in the water tank. It will open to fill the water tank and shut off when water reaches the pre-determined level. The valve opening will modulate, adjusting the fill flow to discharge flow, maintaining a constant upper level of the water tank.

OPERATION

Valve pressure differential powers the diaphragm actuator to operate the valve. Lower control chamber is connected through a fixed orifice to downstream pressure; it serves as a cushioning for smooth operation. Upper control chamber which operates on two-way control principle has a varying pressure produced by pilot modulating in conjunction with upstream restriction needle. Should the water level rise to the pre-determined level, float action tends to close pilot valve and the main valve modulates to close.

Deviations from the above shall be clearly indicated in the Alterations by Tenderer.

PS 5 CERTIFICATION AND DOCUMENTATION

All valves are to be supplied with material and pressure test certificates and are to be tagged as per the data sheets.

At the time of delivery three copies of the Operating and Maintenance Manuals and final documentation comprising of the following documents to be delivered to the engineer:

- Technical specification
- Drawings/Specification schedules
- Exploded drawings of each component and parts list, including materials of construction.
- Quality plans, Material certification (Heat treatment records, etc.)
- Commissioning records and test sheets.

The system of units for all documentation shall be the international metric system.

Failure to provide any of the required certification will result in the rejection of the applicable component, and replacement of the component at the suppliers cost.

PS 6 CORROSION PROTECTION

The supplier is to note that the equipment is to be installed in a highly corrosive environment, and that all materials that are corrosive are to be suitably coated prior to delivery to site.

The purpose of the painting shall be to not only prevent corrosion but also to provide an appealing finish. To this end careful preparation must be under taken to ensure that a smooth blemish free finish is obtained.

The Supplier is to note that he is responsible to deliver all materials to site in an undamaged condition. He shall take all necessary precautions to ensure that the protective coatings are not damaged.

Items will be inspected on arrival and unloading at the plant and any repairs necessary shall be at the cost of the Supplier. Such repairs shall comply with all requirements of this Specification.

PS 7 INSPECTION AND TESTING

Inspection by the Contractor

The minimum inspection to be carried out by the Contractor shall be that which is necessary to ensure compliance with all clauses of this Specification, since he will be held responsible for non-compliance in any respect and shall be required to repair any defect to the satisfaction of the Engineer.

Inspection by the Engineer

The Engineer or his designated representative has the right to inspect any item covered in the Contract at any time.

Inspection by the engineer shall not relieve the supplier of any of his obligations under this contract.

PS 7.1 HYDROSTATIC PRESSURE TESTS

All pieces of equipment subject to water, oil or air pressure shall be tested at a pressure not less than one and one half times the design pressure.

Each piece shall withstand the hydrostatic test pressure without exhibiting signs of sweating, undue deformation and stressing, or defect of any kind.

The hydrostatic test pressure shall be maintained for a period of at least 60 minutes.

PS 7.2 INSPECTION OF COATINGS

Tests shall include measurement of the following:

Final coating thickness; pinhole detection; paint bonding tests. Paint film to substrate bond-tests shall also be executed.

PS 7.3 RESPONSIBILITY AND PERIOD OF MAINTENANCE

After the commissioning, the maintenance period will be deemed to have started and will continue for a period of 12 months. The responsibility of the Contractor concerning his equipment is in no way alleviated by the Commissioning.

The Contractor shall make good, free of all charges, any defects arising during this Period of Maintenance including the replacement of all defective parts and their installation and re-commissioning. This guarantee shall apply to all defects arising during proper use of the plant, due to faulty design or maintenance instructions, inferior materials or poor workmanship.

Maintenance by the Client's personnel during the Period of Maintenance shall be limited to cleaning and lubrication only as instructed by the Contractor. All other maintenance or adjustments shall be carried out by the Contractor.

Should any component part of any main or ancillary equipment fail to perform in accordance with its intended function during the Period of Maintenance, the Engineer shall have the right to reject the component part and order its replacement with a more reliable part at the Contractor's expense. The replacement part shall be guaranteed for a further twelve months or to the end of the Period of Maintenance, whichever is the later.

After the period of 12 months the final commissioning and handover will take place. The procedure as described above for the initial commissioning will be repeated and no deterioration in the performance and efficiency of the pump must be noted.

Test results shall be included in the Operating and Maintenance Manual.

If either party insists on a recalibration of any item of equipment, then the cost of the re-calibration shall be borne by that party if it is found that the instrument did not require re-calibration.

PS 8 REJECTIONS

The Engineer reserves the right to reject any control valve, at the time of the Works test, the Acceptance Test on Site or after, during the Period of Maintenance in the following cases:

- Malfunctioning of any control valve

- Any deviation from these specifications not agreed previously in writing.

The Engineer reserves the right to reject any part of the equipment if the above mentioned corrections are not forthcoming. Rejection implies the recovery, by the Engineer, of all monies paid to the Contractor who shall remove at his own expense all the plant supplied by him when ordered to do so.

"PREVIEW COPY ONLY"

TRANSNET CAPITAL PROJECTS

BERTH 9 FIRE PUMPS

SUPPLY OF CONTROL VALVES

TENDER DOCUMENT

SECTION C

SCHEDULE OF QUANTITIES

The Conditions of Contract, the specifications (including the project specification) and the data sheets are to be read in conjunction with the schedule of quantities.

The schedule comprises items covering the Contractor's profit, costs of general liabilities, overheads, transport and any other costs associated with this supply.

The Tenderer is at liberty to insert a rate of his own choosing for each item in the schedule and his attention is drawn to the fact that the Contractor has the right, under various circumstances, to payment for additional works carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the schedule by the Tenderer (plus VAT).

The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices (excluding VAT) to the client for the work described under the item. Such prices shall cover all costs and expenses that may be required in and for the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. The contractor is to include all necessary items and work under the applicable heading, even if the heading is not fully inclusive.

Each item priced shall be extended to the "Amount" column by the Tenderer with the exception of the items for which a rate only is required or which already have provisional sums affixed thereto. Should any item in the Schedule of Quantities not be priced, by design or by omission, it shall be held that the cost of the work associated with such items is spread over and included in the prices tendered for other items of work. Should the supplier not be able, or not wish to supply a particular item, a "No bid" shall be entered against the item.

In the event of there being any errors of extension or addition, these will be corrected, the rates being taken as correct and binding.

All prices shall be in South African Rands and the supplier is to clearly stipulate if any of the prices are affected by exchange rates and to quote the relevant exchange rate used to price the tender.

Each item priced by the Tenderer shall be in BLACK INK.

TRANSNET NEW FIRE PUMPS AT BERTH 9

ITEM NO.	PAYMENT REFERS	DESCRIPTION	UNIT	QUANT	RATE	AMOUNT
SUPPLY OF CONTROL VALVES						
B1		PRELIMINARY AND GENERAL				
B1.1		All company and office overheads associated with the supply of the control valves.	Sum	1.00		
B1.2		Inspection and Testing Cost to comply with requirements of the tender document specification (Refer to equipment data sheets) over and above company standard testing specifications including training / inductions to be conducted for commissioning.	Sum	1.00		
B1.3		Supply all labour and materials to transport, deliver and unload the control valves at Berth 9 Island View including of all import duties taxes and insurance to the point of delivery.	Sum	1.00		
B2		CONTROL VALVE SUPPLY				
B2.1		Control valves supply in accordance with the tender specification Diam. 200mm (PCV1) Diam. 200mm (PCV2) Diam. 150mm (PCV3)	No. No. No.	2.00 1.00 1.00		
B3		COMMISSIONING				
B3.1		Provision of assistance during commissioning	Sum	1.00		
B4		TRANSPORTATION				
B4.1		Transport, deliver and unload	Sum	1.00		
B5		ADDITIONALS				
B5.1		Tenderer to specify any additional cost that will be incurred to complete or deliver in full to the tendered scope.	Sum	1.00		

"PREVIEW COPY ONLY"

COMPANY NAME _____ DATE _____

PRINT NAME _____

SIGNATURE _____

APPENDIX A: ALTERATIONS BY TENDERER

Should the Tenderer desire to make any departures from or modifications to the General Conditions of Contract, Specification, Schedule of Quantities or Drawings, or to qualify his tender in any way, he shall set out his proposals clearly hereunder, or alternatively state them in a covering letter attached to his tender and referred to hereunder, failing which the tender will be deemed to be unqualified. If no departures or modifications are desired, the Schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	CLAUSE OR ITEM

Signature of Tenderer :

Date:

"PREVIEW COPY ONLY"

APPENDIX B : PCV1 DATA SHEET (FIRE PUMPS PROTECTION)

B2.1.a

Tenders may offer as many alternatives as they wish.
Please Photostat these data sheet and fill in alternatives.

DETAIL	SPECIFIED	SUPPLIED
Valve Type	Hydraulic Controlled Pressure Sustaining Valve	
Valve Number	TBC by TCP _____ TBC by TPC _____	
Size	200NB	
Number Required	2	
Actuation	Preset Hydraulic Control	
Make		
Model Number		
LOCATION		
City	Durban – Island View	
Plant	Berth 9 Fire Pump	
Area	Berth 9	
Electrical Area Classification	Not classified	
FLUID DATA		
Liquid	Water / salt water	
Temperature @ Operating Point	Ambient (20 °C)	
Density @ Operating Point	1.0 - 1.2 kg/l	
Viscosity @ Operating Point	0.974 – 1.060 cP	
PHYSICAL PROPERTIES		
Flow Coefficient		
Maximum Operating Temperature	35°C	
Minimum Operating Temperature	10°C	
Maximum Design Pressure	18 Bar(g)	
Maximum Operating Pressure	10 Bar(g)	
Configuration	Pressure Sustaining	
Set Pressure	10 Bar (g)	
Flow Rate	480 m3/hr	
End Connections	Flanged - ANSI 150 LB RF	
Face to Face dimension	Supplier to advise	
MATERIALS OF CONSTRUCTION		
Body	Carbon Steel (A216 WCB)	
Trim	Stainless Steel (AISI 316)	
Seat & Seals	NBR	
Elastomers & O-Rings	NBR	
CORROSION PROTECTION		
External - Body	Manufacturers Standard	

DETAIL	SPECIFIED	SUPPLIED
APPLICABLE STANDARDS		
Design	ASME B 16.34	
Product	water or sea water	
Face-to-Face	ASME B16.10	
Flanges	ASME B16.5	
Bolting	ASTM A193	
Leak-Tightness		
UL / FM Certification Required	TBC by TCP	
NOTES		
Valve construction and material selection is to be uniform for all valves supplied. Valves to be interchangeable and compatible with all products		

"PREVIEW COPY ONLY"

APPENDIX C : PCV2 DATA SHEET (RETURN LINE TO WATER TANK)

B2.1.b

Tenders may offer as many alternatives as they wish.
Please Photostat these data sheet and fill in alternatives

DETAIL	SPECIFIED	SUPPLIED
Valve Type	Hydraulic Controlled Pressure Sustaining Valve + suitable Orifice Plate	
Valve Number	TBC by TCP	
Size	200NB	
Number Required	1	
Actuation	Preset Hydraulic Control	
Make		
Model Number		
LOCATION		
City	Durban – Island View	
Plant	Berth 9 Fire Pump	
Area	Berth 9	
Electrical Area Classification	Not classified	
FLUID DATA		
Liquid	Water / salt water	
Temperature @ Operating Point	Ambient (20 °C)	
Density @ Operating Point	1.0 - 1.2 kg/l	
Viscosity @ Operating Point	0.974 – 1.060 cP	
PHYSICAL PROPERTIES		
Flow Coefficient		
Maximum Operating Temperature	35°C	
Minimum Operating Temperature	10°C	
Maximum Design Pressure	18 Bar(g)	
Maximum Operating Pressure	10 Bar(g)	
Configuration	Pressure Sustaining	
Set Pressure	10 Bar (g)	
Flow Rate	480 m3/hr	
End Connections	Flanged - ANSI 150 LB RF	
Face to Face dimension	Supplier to advise	
MATERIALS OF CONSTRUCTION		
Body	Carbon Steel (A216 WCB)	
Trim	Stainless Steel (AISI 316)	
Seat & Seals	NBR	
Elastomers & O-Rings	NBR	
CORROSION PROTECTION		

DETAIL	SPECIFIED	SUPPLIED
External - Body	Manufacturers Standard	
APPLICABLE STANDARDS		
Design	ASME B 16.34	
Product	Water or sea water	
Face-to-Face	ASME B16.10	
Flanges	ASME B16.5	
Bolting	ASTM A193	
Leak-Tightness		
UL / FM Certification Required	TBC by TCP	
NOTES		
Valve construction and material selection is to be uniform for all valves supplied. Valves to be interchangeable and compatible with all products		

"PREVIEW COPY ONLY"

APPENDIX D : PCV3 DATA SHEET (RESERVIOR / FLOAT VALVE)

B21c

Tenders may offer as many alternatives as they wish.
Please Photostat these data sheet and fill in alternatives

DETAIL	SPECIFIED	SUPPLIED
Valve Type	Hydraulic Controlled Reservoir /Float Valve	
Valve Number	TBC by TCP	
Size	150NB	
Number Required	1	
Actuation	Preset Hydraulic Control	
Make		
Model Number		
LOCATION		
City	Durban – Island View	
Plant	Berth 9 Fire Pump	
Area	Berth 9	
Electrical Area Classification	Not classified	
FLUID DATA		
Liquid	Water / salt water	
Temperature @ Operating Point	Ambient (20 °C)	
Density @ Operating Point	1.0 - 1.2 kg/l	
Viscosity @ Operating Point	0.974 – 1.060 cP	
PHYSICAL PROPERTIES		
Flow Coefficient		
Maximum Operating Temperature	35°C	
Minimum Operating Temperature	10°C	
Maximum Design Pressure	18 Bar(g)	
Maximum Operating Pressure	10 Bar(g)	
Configuration	Water level control	
Set Pressure	-	
Flow Rate	480 m3/hr	
End Connections	Flanged - ANSI 150 LB RF	
Face to Face dimension	Supplier to advise	
MATERIALS OF CONSTRUCTION		
Body	Carbon Steel (A216 WCB)	
Trim	Stainless Steel (AISI 316)	
Seat & Seals	NBR	
Elastomers & O-Rings	NBR	
CORROSION PROTECTION		
External - Body	Manufacturers Standard	

DETAIL	SPECIFIED	SUPPLIED
APPLICABLE STANDARDS		
Design	ASME B 16.34	
Product	Water or sea water	
Face-to-Face	ASME B16.10	
Flanges	ASME B16.5	
Bolting	ASTM A193	
Leak-Tightness		
UL / FM Certification Required	TBC by TCP	
NOTES		
Valve construction and material selection is to be uniform for all valves supplied. Valves to be interchangeable and compatible with all products		

"PREVIEW COPY ONLY"