
TRANSNET SOC LTD

TENDER NUMBER: TNPA/2023/07/0011/34733/RFP

ADDENDUM NO: 07

DATED: 22 APRIL 2024

The following information is furnished in addition to, in amplification and substitution of, matters contained in the tender documents issued in respect of the abovementioned work.

1. Part C2.2: Bill of Quantities

Changes have been made to the Bill of Quantities

Tenderers are to ensure they price on the updated BOQ

2. Part T1.1: Tender Notice and Invitation to Tender

The tender closing date is extended from 26 April 2024 @ 16:00 to the 10 May 2024 @ 16:00

The original BOQ has been replaced and superseded by the Attached **Annexure A**

This addendum must be signed and submitted with your tender.

Prepared By:  _____

Phelokazi Madaki

Date: 22 April 2024

Approved By: _____

Michael Hogg

Date: 22 April 2024



FROM: _____

DATE: _____

TENDER NUMBER: TNPA/2023/07/0011/34733/RFP
REPLACEMENT OF STURROCK DRY DOCK (SDD) INNER CAISSON GATE AT THE PORT OF
CAPE TOWN FOR A PERIOD OF 24 MONTHS.

Dear Sir / Madam

Receipt of **Addendum No. 07** dated **22 April 2024** is hereby acknowledged.

Kind regards

TENDERER

NOTE: The undersigned confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer.

PROJECT PACKAGE NUMBER:

TNPA/2023/07/0011/34733/RFP

**REPLACEMENT OF STURROCK DRY DOCK (SDD) INNER
CAISSON GATE AT THE PORT OF CAPE TOWN FOR A PERIOD OF
24 MONTHS.**

ANNEXURE A:



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

PART 2: PRICING DATA

Document reference	Title	No of pages
	This Cover	1
C2.1	Pricing instructions: Option B	3
C2.2	<i>The bill of quantities</i>	46
	Total number of pages	50



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

C2.1 Pricing instructions: Option B

The conditions of contract

How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 (ECC3) Option B states:

Identified and defined terms	11 11.2	<p>(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.</p> <p>(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.</p> <p>(28) The Price for Work Done to Date is the total of</p> <ul style="list-style-type: none"> • the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and • a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed. <p>Completed work is work without Defects which would either delay or be covered by immediately following work.</p> <p>(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.</p>
-------------------------------------	------------	---

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract (June 2005) Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

Historically bill of quantities-based contracts in South Africa have been influenced by the different approaches of the civil engineering and building sectors of the industry through their respective discipline based standard forms of contract and methods of measurement. This is particularly apparent in the approach to the Preliminary and General bill. On the other hand, because ECC3 caters for a number of disciplines in the same contract, including electrical works, a different approach not currently found in local methods of measurement to the Preliminary & General bill items may have been used.

The NEC approach to the P & G bill assumes use will be made of method related charges for Equipment applied to Providing the Works based on durations shown in the Accepted Programme, fixed charges for the use of Equipment that is required throughout the construction phase, time related charges for people working in a supervisory capacity for the period required, and lump sum charges for other facilities or



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

services not directly related to performing work items typically included in other parts of the bill.

Measurement and payment

Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
Prov sum ¹	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

General assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

¹ Provisional Sums should not be used unless absolutely unavoidable. Rather include specifications and associated bill items for the most likely scope of work, and then change later using the compensation event procedure if necessary. This is because tenderers cannot programme effectively for unknown scopes of work



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.

Clause 63.13 in Option B provides that these rates and Prices may be used as a basis for assessment of compensation events instead of Defined Cost.

Where this contract requires detailed drawings, designs or other information to be provided, and no rates or prices are included in the *bill* specifically for such matters, then the *Contractor* is deemed to have allowed for all costs associated with such requirements within the tendered rates and Prices in the Bill of Quantities.

An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*. If a number of items are grouped together for pricing purposes, this will be treated as a single lump sum.

The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due and not the quantities given in the Bill of Quantities.

The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. More detail regarding the extent of the work entailed under each item is provided in the Works Information.



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

C2.2 Bill of Quantities

Item No	Short Description	Unit	Quantity	Rate	Amount
	<p>SECTION: A</p> <p>PRELIMINARY & GENERAL</p> <p>Allow for all costs and expenses in connection with the following items:</p> <p><u>Fixed-charge items</u></p> <p>General requirements and conditions</p> <p><u>Contractual requirements:</u></p>				
A1	Contractual requirements	Sum	1		
	<p><u>Establishment of facilities for engineer:</u></p> <p><u>Furnished offices</u></p>				
A2	a) Sturrock Dry Dock	Sum	1		
A3	b) Synchro lift	Sum	1		
	<u>Name boards</u>				
A4	a) Sturrock Dry Dock	Sum	1		
A5	b) Synchro Lift	Sum	1		
	<p><u>Establishment of facilities for contractor:</u></p> <p>Offices and storage sheds:</p>				
A6	a) Sturrock Dry Dock	Sum	1		
A7	b) Synchro-Lift	Sum	1		
	Living accommodation:				
A8	a) Sturrock Dry Dock	Sum	1		
A9	b) Synchro Lift	Sum	1		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	Ablution and latrine facilities:				
A10	a) Sturrock Dry Dock	Sum	1		
A11	b) Synchro Lift	Sum	1		
A12	<u>Tools and equipment</u>				
	Water supplies, electric power and communications :				
A13	a) Sturrock Dry Dock	Sum	1		
A14	b) Synchro Lift	Sum	1		
	Dealing with water:				
A15	a) Sturrock Dry Dock	Sum	1		
A16	b) Synchro Lift	Sum	1		
	Access:				
A17	a) Sturrock Dry Dock	Sum	1		
A18	b) Synchro Lift	Sum	1		
	Plant:				
A19	a) Sturrock Dry Dock	Sum	1		
A20	b) Synchro Lift	Sum	1		
	<u>Other Fixed-charge Obligations:</u>				
A21	Survey, setting out and preparation of as-built drawings.	Sum	1		
A22	Designs, drawings and approvals required for the works (including PrArch.) (Capped at 5% of total contract value)	Sum			
A23	Soil testing equipment.	Sum	1		
A24	Environmental management.	Sum	1		

Item No	Short Description	Unit	Quantity	Rate	Amount
A25	1) Compile a Site Specific Environmental Management Plan (refer to C3 Clause 4)	Sum	1		
	Health and safety: The contractor shall comply with the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 19093 (Act No. 85 of 1993) with reference to the C3 Clause 3.				
A26	Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.	Sum	1		
	Removal of site establishment:				
A27	a) Sturrock Dry Dock	Sum	1		
	b) Synchro Lift	Sum	1		
	Removal of site establishment:				
A28	a) Sturrock Dry Dock	Sum	1		
A29	b) Synchro Lift	Sum	1		
	<u>General</u>				
A30	Instruction manuals and guarantees	Sum	1		
A31	As built information	Sum	1		
	<u>Samples, Shop Drawings & Manufacturer's Instructions</u>				
A32	Samples of materials	Sum	1		
A33	Workmanship samples	Sum	1		

Transnet National Ports Authority
Tender Number: TNPA/2023/07/0011/34733/RFP
Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
A34	Drawings: Workshop/Construction and "As Builts" Related all components of the System/Scope for Sturrock Floating Gate	Sum	1		
	Mobilisation of marine plant:				
A35	a) Sturrock Dry Dock	Sum	1		
A36	b) Synchro Lift	Sum	1		
	<u>Plant Hire</u>				
	Set-up of Fabrication Yard:				
A37	a) Sturrock Dry Dock	Sum	1		
A38	b) Synchro Lift	Sum	1		
	Set-up of Assembly Yard:				
A39	a) Sturrock Dry Dock	Sum	1		
A40	b) Synchro Lift	Sum			
	Concrete batch plant (if required):				
A41	a) Sturrock Dry Dock	Sum	1		
A42	b) Synchro Lift	Sum	1		
	Temporary support, scaffolding and rigging:				
A43	a) Sturrock Dry Dock	Sum	1		
A44	b) Synchro Lift	Sum	1		
	Demobilisation of Fabrication Yard:				
A45	a) Sturrock Dry Dock	Sum	1		
A46	b) Synchro Lift	Sum	1		
A47	Other premises not mentioned above	Sum	1		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
A48	All other fixed-charge obligations	Sum	1		
	Other deliverables:				
A49	Operation and Maintenance Manuals Complete for Floating Gate	Sum	1		
	Testing and Completion activities:				
A50	Tests on Completion and Optimisation (hot commissioning) (excluding pre-commissioning) Commissioning tests including putting the whole of the Works into operation (Sturrock Floating Gate)	Sum	1		
A51	Inclining Experiment (refer to C3 Annexure A Naval Architecture Specifications)	Sum	1		
A52	Caisson Functional Test: Scuttling trail run, groove seal and fit test, to confirm no leaking at both grooves after 2 hours in place.	Sum	1		
A53	Taking Over of Complete Works at End of Defects Correction Period	Sum	1		
	Time-related items				
	General requirements and conditions:				
A54	Contractual requirements	month	24		
A55	Environmental management obligations	month	24		
	Site Facilities Complete: Establishment				
A56	a) Sturrock Dry Dock	month	24		
A57	b) Synchro Lift	month	24		
	Site Facilities Complete: Removal				
A58	a) Sturrock Dry Dock	month	24		
A59	b) Synchro Lift	month	24		
	Provision of Site Office for Engineer's Representative:				
A60	a) Sturrock Dry Dock	month	24		
A61	b) Synchro Lift	month	24		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
A62	Provision of Water Supply, Electrical Supply, Communications, Drainage and Access a) Sturrock Dry Dock	month	24		
A63	b) Synchro Lift	month	24		
	Contractor's Superintendence and Management				
	Site Security:	month	24		
A64	a) Sturrock Dry Dock	month	24		
A65	b) Synchro Lift	month	24		
A66	Preparation and Maintenance of Quality Control Plan (QCP)	month	24		
	Health and Safety:				
A67	All requirements and obligations as per the Health and Safety Specifications, and in accordance with the Occupational Health and Safety Act (85 of 1993), Construction Regulations, 2003, including all required permits	month	24		
A68	Risk assessments, Transnet Site induction and permits, Safe Work Procedures and Method Statements	month	24		
A69	Updating of Health and Safety Plan/File	month	24		
A70	Accident prevention officer/ Health and Safety Specialist	month	24		
A71	Medical assessment of employees	month	24		
A72	Maintenance of Health and Safety File and Close out at end of project	month	24		
A73	All other time-related obligations	month	24		
A74	Gas Free Inspection	month	24		
A75	Hot Works Permit Waste Disposal per bin:	month	24		
A76	a) Sturrock Dry Dock	month	24		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
A77	b) Synchro Lift Training: The sum shall cover all activities necessary in preparing and delivering the training requirements for the contract including documentation. This includes process training, operator training, equipment training, systems training, maintenance training etc. Applicable to both Robinson and Sturrock Dry Docks	month	24		
A78	Other: All other items not included above but which are nevertheless necessary to meet the Scope of Work and/or are required for the proper, safe and effective operation of the plant (Specify)	month	24		
A79		month	24		
A80	Site Supervision	month	24		
A81	Company and head office overhead costs Use of TNPA facilities:	month	24		
A82	Synchro lift	month	24		
A83	A Berth	month	24		
A84	Sturrock Dry Dock	month	24		
A85	Freddy's Quay	month	24		
A86	Towage by TNPA	month	24		
A87	Barge Temporary Works:	month	24		
A88	Provision of scaffolding	month	24		
A89	Dealing with traffic and access	month	24		
A90	Working in Water	month	24		
A91	Provision of crane for erection	month	24		
A92	Firewatch	month	24		
A93	Security	month	24		
A94	Temporary support and rigging	month	24		
	TOTAL SECTION A: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	<p>SECTION: B</p> <p>SUNDRIES</p> <p>Allow for all costs and expenses in connection with the following items:</p> <p><u>Contractor Design and Documentation</u></p> <p>Design and provision of Contractor's Documents required as the per the Works Information</p>				
B1	Contractors Design	Sum	1		
B2	3D Model of Final As-Built Floating Gate	Sum	1		
B3	HAZOP4 study	Sum	1		
B4	Design of operation and control system	Sum	1		
B5	Professional videography of project	Sum	1		
B6	Professional photography of project	Sum	1		
B7	All other Contractor's Design requirements	Sum	1		
	<p><u>Provisional Sums:</u></p> <p>Others sums stated provisionally by the Engineer</p>				
B8	<p>Temporary relocation of existing services or equipment as directed by the Engineer Up to a predetermined value of R300 000.00</p> <p>Others sums stated provisionally by the Engineer:</p>	Sum	1	R 300 000.00	R 300 000.00

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
B9	Diving inspections Required up to predetermined value of R200 000.00	Sum	1	R 200 000.00	R 200 000.00
B10	Alterations to existing services or equipment as directed by the Engineer up to the predetermined value of R200 000.00	Sum	1	R 200 000.00	R 200 000.00
B11	Independent inspectorate for inspection of equipment up to predetermined value of R200 000.00	Sum	1	R 200 000.00	R 200 000.00
B12	Visualisation models for training and plant familiarization predetermined value of R200 000.00	Sum	1	R 200 000.00	R 200 000.00
	<u>General</u>				
B13	Operating instructions and signage, as specified	Sum	1		
B14	Precautions against flooding of the Works	Sum	1		
B15	Design, options analysis and planning of temporary works	Sum	1		
B16	Inspections and Testing	Sum	1		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	Daywork (Provisional)				
B17	Allow for the cost of all labour (at full cost of employment), materials and plant, including overheads and profit, superintendence and management				
	<u>Labour:</u>				
B18	Commissioning Engineer	h	60		
B19	Design Engineer/Naval Architect	h	80		
B20	General foreman	h	100		
B21	Skilled labour (Artisan/Electrician)	h	100		
B22	Welder	h	50		
B23	Unskilled labour (Labourer)	h	200		
B24	Electrical foreman	h	100		
B25	Cable jointer	h	60		
B26	Quality Controller	h	60		
B27	Welding Inspector	h	60		
B28	Other Labour	h	60		
	TOTAL SECTION B: Carried to Summary				R

Item No	Short Description	Unit	Qty	Rate	Amount
	<p>SECTION: E1 CAISSON GATE ELECTRICAL</p> <p>Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:</p> <p>IP65 minimum Distribution Board Panels complete. Factory acceptance testing for two persons included.</p>				
E1.1	Supply	No	1		
E1.2	Installation	No	1		
E1.3	Testing and Commissioning	No	1		
	<p>IP65 minimum pedestal mounted portable generator connection box with a IP66 63A 5 pin 400VAC male socket outlet complete.</p>				
E1.4	Supply	No	1		
E1.5	Installation	No	1		
	<p>Lighting</p> <p>Type A: IP66 minimum 41W LED Vapour Proof Fitting</p>				
E1.6	Supply	No	26		
E1.7	Installation	No	26		
	<p>Type A: IP66 minimum 41W LED Vapour Proof Fitting (with battery back-up for Emergency)</p>				
E1.8	Supply	No	10		
E1.9	Installation	No	10		
	<p>Type B: IP66 minimum 19W LED Floodlight Fitting,</p>				
E1.10	Supply	No	8		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
E1.11	Installation Type B: IP66 minimum 19W LED Floodlight Fitting (Emergency)	No	8		
E1.12	Supply	No	4		
E1.13	Installation Light Switches IP66 minimum 1 lever 1 way, 20A, surface mounted switch	No	4		
E1.14	Supply	No	4		
E1.15	Installation IP66 minimum 1 lever 2 way, 20A, surface mounted switch	No	4		
E1.16	Supply	No	12		
E1.17	Installation IP66 minimum 2 lever 1 way, 20A, flush mounted switch	No	12		
E1.18	Supply	No	0		Rate only
E1.19	Installation IP66 minimum 2 lever 2 way, 20A, flush mounted switch	No	0		Rate only
E1.20	Supply	No	0		Rate only
E1.21	Installation IP66 minimum 2 lever 3 way 20A, flush mounted switch	No	0		Rate only
E1.22	Supply	No	6		
E1.23	Installation Power Outlets IP66 minimum 3-pin 230VAC socket outlet	No	6		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
E1.24	Supply	No	4		
E1.25	Installation	No	4		
	IP66 minimum 32A 5-pin 400VAC male socket outlet				
E1.26	Supply	No	5		
E1.27	Installation	No	5		
	IP66 minimum 63A 5-pin 400VAC male socket outlet mounted in a portable back-up generator connection box				
E1.28	Supply	No	1		
E1.29	Installation	No	1		
	IP66 minimum 63A 5-pin 400VAC female plug				
E1.30	Supply	No	2		
E1.31	Installation	No	2		
	Earthing and Bonding of Electrical System				
E1.32	Ensure earthing & bonding of entire electrical system to caisson gate (including all cable racking)	Sum	1		
E1.33	Labeling of Conductors and Equipment	Sum	1		
	Spares:				
E1.34	Allow for all OEM's recommended spares for items in Section E.1	Sum	1		
	TOTAL SECTION E1: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Qty	Rate	Amount
	<p>SECTION: E2</p> <p>LV CABLES</p> <p>Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:</p> <p>Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.</p>				
E2.1	2.5mm ² x 3 core	m	1500		
E2.2	2.5mm ² x 4 core	m	1000		
E2.3	4.0mm ² x 4 core	m	0		Rate only
E2.4	6mm ² x 4 core	m	500		
E2.5	10mm ² x 4 core	m	0		Rate only
E2.6	16mm ² x 4 core	m	0		Rate only
E2.7	25mm ² x 4 core	m	0		Rate only
E2.8	35mm ² x 4 core	m	0		Rate only
E2.9	50mm ² x 4 core	m	0		Rate only
	<p>Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.</p>				
E2.10	2.5mm ² x 3 core	No	50		
E2.11	2.5mm ² x 4 core	No	26		
E2.12	4.0mm ² x 4 core	No	0		Rate only
E2.13	6mm ² x 4 core	No	16		
E2.14	10mm ² x 4 core	No	0		Rate only



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
E2.15	16mm ² x 4 core	No	0		Rate only
E2.16	25mm ² x 4 core	No	0		Rate only
E2.17	35mm ² x 4 core	No	0		Rate only
E2.18	50mm ² x 4 core	No	0		Rate only
	600/1000V Flexible PVC Nitrile Trailing multicore cable.				
E2.19	16mm ² x 4 core	No	200		
E2.20	25mm ² x 4 core	No	0		Rate only
	Cable Terminations 600/1000V Flexible PVC Nitrile Trailing multicore cable.				
E2.21	16mm ² x 4 core	No	10		
E2.22	25mm ² x 4 core	No	0		Rate only
	Bare Copper Earth cable with stranded conductors.				
E2.23	2.5mm ²	m	300		
E2.24	4mm ²	m	300		
E2.25	6mm ²	m	500		
E2.26	10mm ²	m	0		Rate only
E2.27	16mm ²	m	200		
E2.28	25mm ²	m	0		Rate only
E2.29	35mm ²	m	0		Rate only
E2.30	50mm ²	m	0		Rate only

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E2.31	2.5mm ²	No	80		
E2.32	4mm ²	No	80		
E2.33	6mm ²	No	80		
E2.34	10mm ²	No	0		Rate only
E2.35	16mm ²	No	10		
E2.36	25mm ²	No	0		Rate only
E2.37	35mm ²	No	0		Rate only
E2.38	50mm ²	No	0		Rate only
	Allow for all costs and expenses in connection with the Site installation of the following:				
	Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cable with stranded conductors.				
E2.39	2.5mm ² x 3 core	m	1500		
E2.40	2.5mm ² x 4 core	m	1000		
E2.41	4.0mm ² x 4 core	m	0		Rate only
E2.42	6mm ² x 4 core	m	500		
E2.43	10mm ² x 4 core	m	0		Rate only
E2.44	16mm ² x 4 core	m	0		Rate only
E2.45	25mm ² x 4 core	m	0		Rate only
E2.46	35mm ² x 4 core	m	0		Rate only
E2.47	50mm ² x 4 core	m	0		Rate only

Item No	Short Description	Unit	Quantity	Rate	Amount
	Cable terminations for Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E2.48	2.5mm ² x 3 core	No	50		
E2.49	2.5mm ² x 4 core	No	26		
E2.50	4.0mm ² x 4 core	No	0		Rate only
E2.51	6mm ² x 4 core	No	16		
E2.52	10mm ² x 4 core	No	0		Rate only
E2.53	16mm ² x 4 core	No	0		Rate only
E2.54	25mm ² x 4 core	No	0		Rate only
E2.55	35mm ² x 4 core	No	0		Rate only
E2.56	50mm ² x 4 core	No	0		Rate only
	600/1000V Flexible PVC Nitrile Trailing multicore cable.				
E2.57	16mm ² x 4 core	No	200		
E2.58	25mm ² x 4 core	No	0		Rate only
	Cable Terminations 600/1000V Flexible PVC Nitrile Trailing multicore cable.				
E2.59	16mm ² x 4 core	No	10		
E2.60	25mm ² x 4 core	No	0		Rate only
	Bare Copper Earth cable with stranded conductors.				
E2.61	2.5mm ²	m	300		
E2.62	4mm ²	m	300		
E2.63	6mm ²	m	500		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
E2.64	10mm ²	m	0		Rate only
E2.65	16mm ²	m	200		
E2.66	25mm ²	m	0		Rate only
E2.67	35mm ²	m	0		Rate only
E2.68	50mm ²	m	0		Rate only
	Cable terminations for bare copper earth cables, complete, including gland shroud, lugs, number tags, etc and connection.				
E2.69	2.5mm ²	No	80		
E2.70	4mm ²	No	80		
E2.71	6mm ²	No	8		
E2.72	10mm ²	No	0		Rate only
E2.73	16mm ²	No	1		
E2.74	25mm ²	No	0		Rate only
E2.75	35mm ²	No	0		Rate only
E2.76	50mm ²	No	0		Rate only
	Spares:				
E2.77	Allow for all OEM's recommended spares for items in Section E.2	Sum	1		
	TOTAL SECTION E2: Carried to Summary				R

Item No	Short Description	Unit	Quantity	Rate	Amount
	<p>SECTION: E3</p> <p>CABLE SUPPORTS</p> <p>Allow for all costs and expenses in connection with design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:</p> <p>Cable Ladder - Stainless steel welded cable ladder, 3mm thick side rails, channel cross rungs at 300mm centres, complete with couplers, clamps, threaded rods, hangers, cantilevers, brackets etc. to fix to trusses, walls.</p>				
	100 x 100mm (W x H)				
E3.1	Straight length	m	100		
E3.2	Bends for cable ladder above	No	10		
	200 x 100mm (W x H)				
E3.3	Straight length	m	100		
E3.4	Bends for cable ladder above	No	10		
	300 x 100mm (W x H)				
E3.5	Straight length	m	100		
E3.6	Bends for cable ladder above	No	10		
	450 x 100mm (W x H)				
E3.7	Straight length	m	250		
E3.8	Bends for cable ladder above	No	20		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	Wire Mesh Tray - Stainless steel welded Wire Mesh Cable Tray, 50 x 50mm Base Aperture, 25 x 50mm Side Aperture, complete with splices, couplers, clamps, threaded rods, hangers, brackets etc to fix to trusses, walls etc				
	100 x 50mm (W x H), Ø 4mm Wire				
E3.9	Straight length	m	100		
	200 x 50mm (W x H), Ø 4mm Wire				
E3.10	Straight length	m	100		
	300 x 50mm (W x H), Ø 4mm Wire				
E3.11	Straight length	m	100		
	400 x 50mm (W x H), Ø 4mm Wire				
E3.12	Straight length	m	0		Rate only
	Supply stainless steel conduit				
E3.13	20 Ø mm	m	200		
E3.14	25 Ø mm	m	200		
	Cable Sealing Solution				
E3.15	Cable Sealing Solution (Roxtec or similar equivalent)	Sum	1		
	Allow for all costs and expenses in connection with the Site installation of the following:				
	Cable Ladder - Stainless steel welded cable ladder, 3mm thick side rails, channel cross rungs at 300mm centres, complete with couplers, clamps, threaded rods, hangers, cantilevers, brackets etc. to fix to trusses, walls.				
	100 x 100mm (W x H)				
E3.16	Straight length	m	100		

Item No	Short Description	Unit	Quantity	Rate	Amount
E3.17	Bends for cable ladder above 200 x 100mm (W x H)	No	10		
E3.18	Straight length	m	100		
E3.19	Bends for cable ladder above 300 x 100mm (W x H)	No	10		
E3.20	Straight length	m	100		
E3.21	Bends for cable ladder above 450 x 100mm (W x H)	No	10		
E3.22	Straight length	m	250		
E3.23	Bends for cable ladder above Wire Mesh Tray - Stainless steel welded Wire Mesh Cable Tray, 50 x 50mm Base Aperture, 25 x 50mm Side Aperture, complete with splices, couplers, clamps, threaded rods, hangers, brackets etc to fix to trusses, walls etc 100 x 50mm (W x H), Ø 4mm Wire	No	20		
E3.24	Straight length 200 x 50mm (W x H), Ø 4mm Wire	m	100		
E3.25	Straight length 300 x 50mm (W x H), Ø 4mm Wire	m	100		
E3.26	Straight length 400 x 50mm (W x H), Ø 4mm Wire	m	10		
E3.27	Straight length Supply Stainless steel conduit	m			Rate only
E3.28	20 Ø mm	m	200		
E3.29	25 Ø mm	m	200		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
E3.30	Cable Sealing Solution (Roxtec or similar equivalent)	Sum	1		
	Spares:				
E3.31	Allow for all OEM's recommended spares for items in Section E.3	Sum	1		
	TOTAL SECTION E3: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	<p><u>SECTION : C1</u></p> <p><u>BILL SECTION C1 - CAISSON GROOVE ASSESSMENT AND REPAIRS</u></p> <p>Note: All works under this section to be confirmed after award and assessments conducted to develop the scope pertaining to the caisson groove refurbishment</p> <p>Note: All works relating to the assessments, testing and repairs shall be in accordance with the specifications and requirements as described in the Part C3 where applicable, and subject to approval during contract execution</p> <p><u>Provisional Sums</u></p>				
C1.1	Assessment of concrete condition to determine the extent and severity of deterioration for caisson groove	Sum	1	R100 000.00	R 100 000.00
C1.2	Proposed methodology to execute repairs of (concrete and granite) deterioration	Sum	1	R400 000.00	R400 000.00



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

C1.3	All testing procedures (Compression test on concrete cores, pull-out test, rebound hammer, ultrasonic pulse velocity, combined NDT methods and material bonding test methods etc.)	Sum	1	R 100 000.00	R 100 000.00
C1.4	Provision of laboratory reports and results, repair methodology and related costs in the form of BOQ	Sum	1	R 80 000.00	R 80 000.00
C1.5	Supply of Material and equipment for approved Caisson groove repair Methodology	Sum	1	R 900 000.00	R 900 000.00
C1.6	Repair of caisson groove execution	Sum	1	R 2 100 000.00	R 2 100 000.00
	TOTAL SECTION C1: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Description	Unit	Qty	Rate	Amount
	<p>SECTION: I1</p> <p>INSTRUMENTATION, CONTROL AND DATA CABLES</p> <p>Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment:</p> <p>Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore control cables with stranded conductors. Cable fixed to cable tray or drawn into sleeves</p>				
I1.1	2.5mm ² x 4 core	m	500		
I1.2	2.5mm ² x 7 core	m	0		Rate only
I1.3	Ethernet Cu Cables	m	100		
	Cable terminations for multicore control cable complete, including gland shroud, lugs, number tags, etc. and connection.				
I1.4	2.5mm ² x 4 core	m	100		
I1.5	2.5mm ² x 7 core	m	0		Rate only
I1.6	Ethernet Cu Cables	m	40		
	Extra low voltage instrumentation cable fixed to cable tray or drawn into sleeves				
I1.7	1.5mm ² 1-pair	m	300		
I1.8	1.5mm ² 2-pair	m	200		
I1.9	1.5mm ² 1-triad	m	0		Rate only
I1.10	1.5mm ² 2-triad	m	0		Rate only
	Terminations for Extra low voltage instrumentation cable				
I1.11	1.5mm ² 1-pair	m	100		

Item No	Short Description	Unit	Quantity	Rate	Amount
I1.12	1.5mm ² 2-pair	m	50		
I1.13	1.5mm ² 1-triad	m	0		Rate only
I1.14	1.5mm ² 2-triad	m	0		Rate only
	Allow for all costs and expenses in connection with the Site installation of the following:				
	Cu/PVC Insulated/PVC Bedded/SWA/PVC Sheathed 600/1000V multicore control cables with stranded conductors. Cable fixed to cable tray, drawn into sleeves or laid into trenches.				
I1.15	2.5mm ² x 4 core	m	500		
I1.16	2.5mm ² x 7 core	m	0		Rate only
I1.17	Ethernet Cu Cables	m	100		
	Cable terminations for multicore control cable complete, including gland shroud, lugs, number tags, etc and connection.				
I1.18	2.5mm ² x 4 core	m	100		
I1.19	2.5mm ² x 7 core	m	0		Rate only
I1.20	Ethernet Cu Cables	m	40		
	Extra low voltage instrumentation cable fixed to cable tray, drawn into sleeves or power skirting.				
I1.21	1.5mm ² 1-pair	m	300		
I1.22	1.5mm ² 2-pair	m	200		
I1.23	1.5mm ² 1-triad	m	0		Rate only
I1.24	1.5mm ² 2-triad	m	0		Rate only
	Terminations for Extra low voltage instrumentation cable				
I1.25	1.5mm ² 1-pair	m	100		
I1.26	1.5mm ² 2-pair	m	50		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
I1.27	1.5mm ² 1-triad	m	0		Rate only
I1.28	1.5mm ² 2-triad	m	0		Rate only
	Spares:				
I1.29	Allow for all OEM's recommended spares for items in Section I.1	Sum	1		
	TOTAL SECTION I1: Carried to Summary				R

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Qty	Rate	Amount
	SECTION: I2 LOCAL CONTROL CONSOLE PANEL				
	Caisson Gate Programmable Logic Controller Local Control Panel LCC-CAISSON complete with hardware, software and programming. Factory acceptance testing for two persons included				
I2.1	Supply	Sum	1		
I2.2	Install	Sum	1		
I2.3	Programming	Sum	1		
I2.4	Testing and Commissioning	Sum	1		
	Spares:				
I2.5	Allow for all OEM's recommended spares for items in Section I.2	Sum	1		
I2.6	PLC Power Supply (Contractor to advise minimum recommended spares based on configuration and equipment offered)	No	1		
I2.7	PLC CPU (Contractor to advise minimum recommended spares based on configuration and equipment offered)	No	1		
I2.8	PLC I/O Modules (Contractor to advise minimum recommended spares based on configuration and equipment offered)	No	1		
I2.9	240VAC/24VDC Power supply	No	1		
	TOTAL SECTION I2: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Qty	Rate	Amount
	SECTION: I3 TELEMETRY				
	Radio Propagation Study				
I3.1	Study Report	Prov. Sum	1	R 200 000.00	R 200 000.00
	Wireless Ethernet				
I3.2	Supply	Sum	2		
I3.3	Install	Sum	2		
I3.4	Testing and Commissioning	Sum	2		
	Spares:				
I3.5	Allow for all OEM's recommended spares for items in Section I.3	Sum	1		
	TOTAL SECTION I3: Carried to Summary				R

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Qty	Rate	Amount
	SECTION: I4 SCADA				
	SCADA HARDWARE				
	SCADA Operator all-in-one computer (workstation) complete with all accessories				
I4.1	Supply	No	2		
I4.2	Install	No	2		
	SCADA OPC Server, rack mounted hot standby configuration complete with all accessories				
I4.3	Supply	No	1		
I4.4	Install	No			
	Historian & SQL Database File Server, rack mounted hot standby configuration complete with all accessories				
I4.5	Supply	No	1		
I4.6	Install	No	1		
	Supervisory Network Ethernet Switch complete				
I4.7	Supply	No	1		
I4.8	Install	No	1		
	Data Control Ethernet Switch Complete				
I4.9	Supply	No	1		
I4.10	Install	No	1		
	SCADA computer UPS				
I4.11	Supply	No	1		
I4.12	Install	No	1		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	SCADA printer				
I4.13	Supply	No	1		
I4.14	Install	No	1		
	VPN Router for remote monitoring and control				
I4.15	Supply and Configure	No	1		
I4.16	Install	No	1		
	Industrial Rugged Tablet				
I4.17	Supply and Configure	No	1		
I4.18	Install	No	1		
	WiFi Access Point				
I4.19	Supply	Sum	1		
I4.20	Install	Sum	1		
I4.21	Other network accessories, switches, routers etc. necessary for a complete SCADA system	Sum	1		
	New Dock Master Office Workstation furniture				
I4.22	Supply	Sum	1		
I4.23	Install	Sum	1		
	SCADA SOFTWARE LICENCE				
I4.24	Adroit SCADA Intelligence (ASI) Licence - 150 pt	Sum	1		
I4.25	SCADA Smart UI Server + 2 Clients licence - 1500 pts	Sum	1		
I4.26	Secure Mobile Gateway (5x client bundle)	Sum	1		

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
	SCADA DEVELOPMENT				
I4.27	Mimics Configuration	Sum	1		
I4.28	Mimics Configuration and setup to rugged tablet	No	1		
I4.29	Alarms and Events Configuration	Sum	1		
I4.30	ASI Configuration, Reporting and dashboard development	Sum	1		
I4.31	Data logging and trends display configuration	Sum	1		
I4.32	Configuring maintenance schedules, logging and allowance for integration into the Employer's asset management system (data base)	Sum	1		
I4.33	Historian data analytics for preventative maintenance	Sum	1		
I4.34	SCADA security (firewall and anti-virus)	Sum	1		
I4.35	Involvement of Adroit OEM for consultation, specification of architecture and commissioning assistance	Sum	1		
I4.36	All other software programming and configuration required for complete and secure SCADA system	Sum	1		
	Spares:				
I4.37	Allow for all OEM's recommended spares for items in Section I.4	Sum	1		
I4.38	Spare Managed Ethernet Switch	No	1		
I4.39	Spare UPS	No	1		
	TOTAL SECTION I4: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Description	Unit	Qty	Rate	Amount
	<p>SECTION: I5 INSTRUMENTATION</p> <p>Allow for all the costs and expenses in connection with the design, manufacture, painting, supplying, delivery, offloading and storage of the following materials and equipment:</p> <p>Referred to as "Supply" in this schedule</p> <p>Allow for all costs and expenses in connection with the Site installation: Scope of Work (excluding pre-commissioning) for the following:</p> <p>Referred to as "Install" in this schedule</p> <p>Pressure Transmitter (Scuttle tanks air valves lines) complete including sensors, transmitters, mounting materials, isolation valve and stands as required.</p>				
I5.1	Supply	No	3		
I5.2	Install	No	3		
	<p>Pressure Guage (Main incoming air lines) complete including sensors, transmitters, mounting materials, isolation valve and stands as required.</p>				
I5.3	Supply	No	2		
I5.4	Install	No	2		
	<p>Hydrostatic Level Transmitter (Scuttle Tanks) complete including sensors, transmitters, mounting materials and stands as required.</p>				
I5.5	Supply	No	3		
I5.6	Install	No	3		
Item No	Short Description	Unit	Quantity	Rate	Amount



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

	Level Float Switches (Actuated valves catchment areas) complete including sensors, transmitters, mounting materials and stands as required.				
I5.7	Supply	No	6		
I5.8	Install	No	6		
	Oxygen Meter (Dry air spaces) complete including sensors, transmitters, mounting materials and stands as required.				
I5.9	Supply	No	8		
I5.10	Install	No	8		
	Level Float Switch (Scuttle Tanks) complete including mounting materials.				
I5.11	Supply	No	3		
I5.12	Install	No	3		
I5.13	Smoke and Heat Detection design and drawings	Sum	1		
I5.14	Design and drawings up to the predetermined value of R500 000.00	Prov Sum	1	R500 000.00	R500 000.00
	Smoke and Heat Detection Vendor Packages Unit Complete including mounting materials.				
I5.16	Supply	Sum	1		
I5.17	Install	Sum	1		
	.				

Item No	Short Description	Unit	Quantity	Rate	
---------	-------------------	------	----------	------	--

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

					Amount
	Beacon and Sounder Complete including mounting materials				
15.18	Supply	Sum	9		
15.19	Install	Sum			
	Spares:				
15.20	Allow for all OEM's recommended spares for items in Section I.5	Sum	1		
15.21	Spare Pressure Transmitter	No	1		
15.22	Spare Hydrostatic Level Transmitter with Sensor	No	1		
15.23	Spare Ultrasonic Level Transmitter with Sensor	No	1		
15.24	Spare Oxygen Meter	No	1		
15.25	Spare Level Float Switch	No	1		
	TOTAL SECTION I5: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Qty	Rate	Amount
	SECTION: S1 CAISSON GATE STRUCTURAL				
	- Allow for all the costs and expenses in connection with the design, manufacture, routine testing, factory acceptance testing (if indicated), supply, delivery, offloading and storage of the following materials and equipment (Refer to C3 Annexure A Naval Architecture Specifications and Drawings 507343-0000-DRG-SS-101 to 113):				
	Water Ballast tank				
S1.1	16mm Shell Plate	t	85.98		
S1.2	12mm Web Plates	t	36.01		
S1.3	200x20mm Flatbar ring flanges	t	0.81		
S1.4	12mm End Frames	t	9.77		
S1.5	25mm Keel Plates	t	48.83		
S1.6	150x90x12 Angles	t	20.00		
S1.7	125x75x12 Angles	t	9.56		
S1.8	25mm Side Plates on Keel Feet	m2	18.60		
S1.9	20mm Plate on the Keel Feet	m2	59.70		
S1.10	20mm 130mm Flat bar rings Flanges	t	1.88		
	Air Compartment				
S1.11	16mm Plate	t	34.42		
S1.12	12mm Plate	t	44.22		
S1.13	12mm internal Bulkheads	t	40.83		
S1.14	12mm Flatbar Flanges	t	6.13		
S1.15	16mm 200x16 Flatbar	t	4.71		
S1.16	12mm Plate	t	4.56		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S1.17	12mm Frame Web Plate	t	24.54		
S1.18	12mm Breasthook Frame Webbs	t	3.05		
S1.19	25mm keel Plates	t	4.20		
S1.20	150x90x12 Angles	t	11.49		
S1.21	150x90x12 Angles	t	11.49		
S1.22	150x90x10	t	4.54		
S1.23	125x75x12	t	7.84		
	Road Deck				
S1.24	16mm Plate Roaddeck shown inverted	t	53.48		
S1.25	12mm Plate under roaddeck	t	1.11		
S1.26	125x75x10 Deck Angles	t	4.37		
S1.27	80x10 Flatbar Ring Flanges	t	0.32		
S1.28	16mm Deck Plate on Road Overhang	t	2.35		
S1.29	16mm Deck Plate on Road Overhang	t	2.35		
S1.30	12mm Plate relating to the end section of the road	t	1.46		
S1.31	10mm Made up tee Sections under extended deck	t	0.16		
	Swedge Bulkheads				
S1.32	12mm Bulkhead Plate	t	64.80		
S1.33	200x12 Flatbar Flanges	t	3.01		
S1.34	12mm Plate Frames	t	6.54		
S1.35	12mm Brackets	t	2.79		
S1.36	150x90x15 Angles	t	5.21		
S1.37	150x90x12 Angles 4164KG	t	4.16		
S1.38	150x90x10 Angles	t	20.12		
	End Plates				
S1.39	150x12mm Face Flats	t	0.47		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S1.40	12mm Web Frames	t	1.13		
S1.41	12mm Wing Plates	t	6.70		
S1.42	12mm Shell Plate of End Column	t	17.90		
S1.43	25mm Keel Plating	t	10.72		
S1.44	16mm Horizontal plates in keel	t	2.75		
S1.45	20mm Seal Backing Plate	t	0.60		
S1.46	End of Column Frame	t	2.23		
S1.47	150x12 Flat Bar rings Flanges	t	1.05		
S1.48	150x90x10 Angles	t	3.06		
S1.49	12mm Side shell Plates	t	0.93		
	Installation of Structural Steelwork				
S1.50	Installation	Sum	1		
	Spares:				
S1.51	Allow for all OEM's recommended spares for items in Section S.1	Sum	1		
	TOTAL SECTION S1: Carried to Summary				R



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Description	Unit	Qty	Rate	Amount
	<p>SECTION: S2</p> <p>CAISSON GATE MECHANICAL AND STRUCTURAL FITTINGS</p> <p>CAISSON PIPING</p> <p>Medium Pressure Pipelines</p> <p>Allow for all the costs and expenses in connection with the design, manufacture, painting, testing and supplying of the following materials and equipment (Refer to Drawings 507343-0000-SS-DRG-109 and specifications C3 Annexure A: Naval Architecture Specification):</p> <p>Supply and delivery of PN10 piping of the following lengths:</p>				
S2.1	N.B. 300 mm (w.t.=10.31mm) MS Sched 40	m	86.80		
S2.2	N.B. 250 mm (w.t.=12.7mm) MS Sched 80	m	22.20		
S2.3	N.B.150 mm (w.t.=10,97mm) 316 SS Sched 80	m	39.60		
S2.4	N.B.80 mm (w.t.= 7,62mm) 316 SS Sched 40	m	42.60		
S2.5	N.B.65 mm (w.t.=7,01mm) 316 SS Sched 40	m	41.50		
	<p>Extra over items for supplying, fitting, welding and testing of stainless steel specials complete with PN10 compression couplings:</p> <p>90° elbows:</p>				
S2.6	65 mm dia	No	5.00		
S2.7	80 mm dia	No	4.00		
S2.8	150 mm dia	No	6.00		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S2.9	250 mm dia	No	6.00		
S2.10	300 mm dia	No	22.00		
	45° elbows:				
S2.11	65 mm dia	No	5.00		
S2.12	80 mm dia	No	24.00		
S2.13	150 mm dia	No	4.00		
S2.14	250 mm dia	No	6.00		
S2.15	300 mm dia (w.t. 10.31 mm)	No	24.00		
	Reducers:				
S2.16	450 mm dia x 250 mm dia	No	12.00		
S2.17	150 mm dia x 80 mm dia	No	12.00		
	End caps (for Maintenance):				
S2.18	250 mm dia	No	2.00		
	Extra over items for supplying, fitting, welding and testing of flanged gate valves (Class 10):				
S2.19	75 mm dia 316 SS Body and blade	No	2.00		
	Extra over items for supplying, fitting, welding and testing of pressure regulating valves (Class 10):				
S2.20	75 mm dia, 316 SS	No	2.00		
	Extra over items for supplying, fitting, welding and testing of pressure relief valves (Class 10):				
S2.21	75 mm dia, 316 SS	No	2.00		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S2.22	Extra over items for supplying, fitting, welding and testing of compressed air actuated ball valves (Class 10): 150 mm dia; 316 SS body and disc, with Electrical actuator	No	4		
S2.23	Extra over items for supplying, fitting, welding and testing of sea water actuated gate valves (Class 10): 250 mm dia; 316 SS body and blade; 304 SS spindle, with Electrical actuator	No	6		
S2.24	Extra over items for supplying, fitting, welding and testing of diaphragm valves (Class 10): 65 mm dia; 316 SS	No	3		
S2.25	ACCESS, HANDRAILS AND STAIRWAYS: Installation of all Access Walkways, Platforms, Ladders and Handrailings complete with Fasteners and Accessories applicable (refer to C3 Annexure A Naval Architecture Specification):	Sum	1		
S2.26	Handrailing Type 1 along side (507343-0000-DRG-SS-109-1) and Handrailing Type 2 to protect DB Board and control station (507343-0000-DRG-SS-109-1) NB 800 Pipe (wt 7.62mm)	m	138.92		
S2.27	NB 32 Pipe (wt 3.56mm)	m	101.26		
S2.28	NB 25 Pipe (wt 3.4mm)	m	100.50		
S2.29	100x6 FB	m	95.82		
S2.30	65x16 FB	m	74.20		
S2.31	Access Ladder (Drawing 507343-0000-DRG-SS-101-8)	m	20.76		
S2.32	GRP staircase and handrails to be attached to steel structure including bolts, fasteners and connection plates (Drawing 507343-0000-DRG-SS-109-1)	Sum	1		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S2.33	Road deck hatch as per drawing 507343-0000-DRG-SS-106 mounted to steel structure including bolts, fasteners, rungs and connection plate(s)	No	2		
	BALLASTING:				
	Mixing, supply and delivery of concrete solid ballast of 2600 kg/m3 density. As per specifications C3 Annexure A: Naval Architecture Specification				
S2.34	Solid Concrete Ballast	t	500		
	Extra over the pouring of Solid Ballast				
S2.35	at Synchronlift	t	200		
S2.36	in Sturrock	t	130		
S2.37	in Sturrock	t	70		
S2.38	Pump site establishment	h	55		
S2.39	Pump Washout	h	55		
	COATINGS AND PAINTING				
S2.40	Blasting, priming and painting as per specifications C3 Annexure A: Naval Architecture Specification for steel corrosion protection, including quality control measures.	m ²	12054		
	ASPHALT BASE AND SURFACING				
S2.41	Tack coat (30% stable-grade emulsion)	m ²	600		
	Asphalt:				



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S2.42	Waterproofing layer : continuously graded fine asphalt (10 mm NMPS), using 50/70 penetration grade binder (30 mm nominal compacted layer thickness), including 1% hydrated lime (active filler) 1% hydrated lime (active filler)	m2	300		
S2.43	Surfacing layer : continuously graded fine asphalt (10 mm NMPS), using 50/70 penetration grade binder (30 mm nominal compacted layer thickness), including 1% hydrated lime (active filler)	m2	300		
S2.44	Adhesive / primer product (abe bitu.@prime or similar approved) applied as a sealing / bonding layer	litre	210		
S2.45	Homogeneous polymer modified binder (SC-E2) applied as a sealing / bonding layer	litre	180		
	MISCELLANEOUS ITEMS:				
	Ventilation:				
S2.46	Axial flow fans and motors as per specification, with flexible collars, spring mounting feet and support frame with associated mounting bolts. The fan unit price must include for the corrosion protection coating as specified. Details of offer to be completed in the data sheets with supporting literature attached	No	8		
	Extra over items for supplying, fitting, welding and testing of strainer grating:				
S2.47	40x8 mm flat bar grating (5.5 m each for 6 gratings)	m	33		
S2.48	40x12 mm flat bar grating (0.2 m each for 6 gratings)	m	1.2		
	Extra over items for supplying, fitting, welding and testing of grating for permanent ballast tank filling trunk:				
S2.49	30x4.5 MENTIS RS40 grating for 0.36 m2 area each for 2 gratings	No	2		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
Bollards And Fenders:					
S2.50	Bollards as per Type DN250 per ISO 3913_1977(en) drawing 507343-000-DRG-SS-110 welded to steel structure	No	6		
S2.51	Panama Type Fairleaders as per drawing 507343-000-DRG-SS-110 welded to steel structure	No	4		
S2.52	Rubber DC Fenders per 350x350x5000 mm (186 total length 93 m per side) with cross section as per 507343-000-DRG-SS-110 including M30 Bolts and washers grade SS316	No	23		
S2.53	Rubber Seal Fender as per 200x200x5000 mm Solid Block Fender (76m in total length) for installation along either side of keel of caisson with cross section as per Detail on Dwg 507343-0000-DRG-SS-102	No	30		
S2.54	Fender Shipping Cost - Cape Town	Sum	1		
Greenheart/Azobe/Ekki Timber on Keel as per Keel Drawing 507343-000-DRG-SS-102:					
S2.55	Four strips of 160x160 mm (76 long each, 304 m in total)	m ³	8		
S2.56	One strip of 870x250mm (made up of 4x 250x250) 76 m long	m ³	19		
S2.57	Wood Shipping Cost	Sum	1		
Special Tools					
S2.58	All special tools required for maintenance and repairs applicable to all equipment under this section, complete with storage cabinet/housing	Sum	1		
S2.59	Installation	Sum	1		



Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

Item No	Short Description	Unit	Quantity	Rate	Amount
S2.60	Spares: Allow for all OEM's recommended spares for items in Section S.2	Sum	1		
S2.61	Spare Axial Fans	No	1		
S2.62	Spare Valves and Actuators	Sum	1		
	Supply and Installation of Sacrificial Zinc Aluminum Anodes as per Anode Plan (Refer to Drawing 507343-000-DRG-SS-113 and specifications C3 Annexure A: Naval Architecture Specification) inclusive of 50mm x 6 mm galvanised steel mounting straps welded to the caisson with anodes mounted bolt on:				
S2.63	BN4 Bullnose 450x100x50 19.6kg 14kg 5.6kg 56 784kg	No	56		
S2.64	BN5 Bullnose 620x100x60	No	16		
S2.65	BN3 Bullnose 440x100x40	No	240		
S2.66	BN5 Bullnose 620x100x60	No	70		
S2.67	Allow Provisional Sum for all items not listed above	Prov. Sum	1	R3 000 000.00	R3 000 000.00
TOTAL SECTION S2: Carried to Summary					R

Transnet National Ports Authority

Tender Number: TNPA/2023/07/0011/34733/RFP

Description of the Works: Replacement of Sturrock Dry Dock (SDD) Inner Caisson Gate at the Port of Cape Town for a period of 24 months

ITEM	DESCRIPTION	AMOUNT
	TRANSNET CAISSON GATE	
	ELECTRICAL AND ELECTRONIC WORKS	
SECTION: A	PRELIMINARY & GENERAL	
SECTION: B	SUNDRIES	
SECTION: E1	CAISSON GATE ELECTRICAL	
SECTION: E2	LV CABLES	
SECTION: E3	CABLE SUPPORTS	
SECTION: I1	INSTRUMENTATION, CONTROL AND DATA CABLES	
SECTION: I2	LOCAL CONTROL CONSOLE PANEL	
SECTION: I3	TELEMETRY	
SECTION: I4	SCADA	
SECTION: I5	INSTRUMENTATION	
SECTION: C1	CIVIL WORKS	
SECTION: S1	CAISSON GATE STRUCTURAL	
SECTION: S2	CAISSON GATE MECHANICAL AND STRUCTURAL FITTINGS	
TOTAL OF PRICED ITEMS TO BE CARRIED TO FORM OF OFFER		R