

BILLS OF QUANTITIES

FOR

CONSTRUCTION OF THE WALVIS BAY
INDEPENDENCE BEACH PROMENADE

AT

WALVIS BAY, ERONG REGION FOR



Private Bag 5017
Walvis Bay

BID NO : _____
NAME OF BIDDER : _____
CLOSING DATE : _____ CLOSING TIME : _____
BID AMOUNT : N\$ _____

CONSULTANTS



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APRIL 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE
BEACH PROMENADE IN WALVIS BAY IN THE**

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**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE
BEACH PROMENADE IN WALVIS BAY IN THE**

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LIST OF DRAWINGS

DRAWINGS

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Item No		Quantity	Rate	Amount
	<p><u>CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION</u></p> <p><u>SECTION NO.</u></p> <p><u>1 BILL NO. 1</u></p> <p><u>PRELIMINARIE</u></p> <p><u>S NOTES</u></p> <p>1. <u>The "General Conditions of Contract" as included in the "Open National Bidding for Works" shall be the form approved.</u></p> <p>2. <u>Bidders are referred to the above mentioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary.</u></p> <p><u>CONDITIONS OF BUILDING CONTRACT</u></p> <p>A <u>GENERAL</u></p> <p>Clause 1: Definitions</p> <p>B F:.....T:.....V:.....</p> <p>Clause 2: Interpretations</p> <p>C F:.....T:.....V:.....</p> <p>Clause 3: Language and Law</p> <p>D F:.....T:.....V:.....</p> <p>Clause 4: Project manager's decisions</p> <p>F:.....T:.....V:.....</p> <p style="text-align: right;">Carried to Collection</p> <p>Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025</p>			
		Item		
		Item		
		Item		
		Item		
			N\$	

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Clause 5: Delegation F:.....T:.....V:.....	Item		
B	Clause 6: Communications F:.....T:.....V:.....	Item		
C	Clause 7: Sub-contracting F:.....T:.....V:.....	Item		
D	Clause 8: Other contractors F:.....T:.....V:.....	Item		
E	Clause 9: Personnel and Equipment F:.....T:.....V:.....	Item		
F	Clause 10: Employer's and Contractor's Risks F:.....T:.....V:.....	Item		
G	Clause 11: Employer's Risks F:.....T:.....V:.....	Item		
H	Clause 12: Contractor's Risks F:.....T:.....V:.....	Item		
J	Clause 13: Insurance F:.....T:.....V:.....	Item		
K	Clause 14: Site Data F:.....T:.....V:.....	Item		
L	Clause 15: Contractor to Construct the Works F:.....T:.....V:.....	Item		
Carried to Collection			N\$	
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025				

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	Clause 16: The Works to Be Completed by the Intended Completion Date F:.....T:.....V:.....	Item
B	Clause 17: Approval by the Project Manager F:.....T:.....V:.....	Item
C	Clause 18: Safety F:.....T:.....V:.....	Item
D	Clause 19: Discoveries F:.....T:.....V:.....	Item
E	Clause 20: Possession of the Site F:.....T:.....V:.....	Item
F	Clause 21: Access to the Site F:.....T:.....V:.....	Item
G	Clause 22: Instructions F:.....T:.....V:.....	Item
H	Clause 23: Appointment of the Adjudicator F:.....T:.....V:.....	Item
J	Clause 24: Procedure for Disputes F:.....T:.....V:.....	Item
	<u>TIME CONTROL</u>	
K	Clause 25: Program F:.....T:.....V:.....	Item
L	Clause 26: Extension of the Intended Completion Date F:.....T:.....V:.....	Item
Carried to Collection		N\$
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025		

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Clause 27: Acceleration F:.....T:.....V:.....	Item		
B	Clause 28: Delays Ordered by the Project Manager F:.....T:.....V:.....	Item		
C	Clause 29: Management Meetings F:.....T:.....V:.....	Item		
D	Clause 30: Early Warning F:.....T:.....V:.....	Item		
	<u>QUALITY CONTROL</u>			
E	Clause 31: Identifying Defects F:.....T:.....V:.....	Item		
F	Clause 32: Tests F:.....T:.....V:.....	Item		
G	Clause 33: Correction of Defects F:.....T:.....V:.....	Item		
H	Clause 34: Uncorrected Defects F:.....T:.....V:.....	Item		
	<u>COST CONTROL</u>			
J	Clause 35: Contract Price F:.....T:.....V:.....	Item		
K	Clause 36: Changes in the Contract Price F:.....T:.....V:.....	Item		
L	Clause 37: Variations F:.....T:.....V:.....	Item		
Carried to Collection			N\$	
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Clause 38: Cash Flow Forecasts			
	F:.....T:.....V:.....	Item		
B	Clause 39: Payment Certificates			
	F:.....T:.....V:.....	Item		
C	Clause 40: Payments			
	F:.....T:.....V:.....	Item		
D	Clause 41: Compensation Events			
	Notwithstanding the provisions of this clause, the preliminaries shall be adjusted on the basis of fixed, time and value related items.			
	F:.....T:.....V:.....	Item		
E	Clause 42: Tax			
	F:.....T:.....V:.....	Item		
F	Clause 43: Currencies			
	F:.....T:.....V:.....	Item		
G	Clause 44: Price Adjustment			
	F:.....T:.....V:.....	Item		
H	Clause 45: Retention			
	F:.....T:.....V:.....	Item		
J	Clause 46: Liquidated Damages			
	F:.....T:.....V:.....	Item		
K	Clause 47: Bonus			
	F:.....T:.....V:.....	Item		
L	Clause 48: Advance Payment			
	F:.....T:.....V:.....	Item		
Carried to Collection			N\$	
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Clause 49: Securities F:.....T:.....V:.....	Item		
B	Clause 50: Dayworks F:.....T:.....V:.....	Item		
C	Clause 51: Cost of Repairs F:.....T:.....V:.....	Item		
D	Clause 52: Labour Clause F:.....T:.....V:.....	Item		
<u>FINISHING THE CONTRACT</u>				
E	Clause 53: Completion F:.....T:.....V:.....	Item		
F	Clause 54: Taking Over F:.....T:.....V:.....	Item		
G	Clause 55: Final Account F:.....T:.....V:.....	Item		
H	Clause 56: Operating and Maintenance Manuals F:.....T:.....V:.....	Item		
J	Clause 57: Termination F:.....T:.....V:.....	Item		
K	Clause 58: Fraud and Corruption F:.....T:.....V:.....	Item		
L	Clause 59: Payment upon Termination F:.....T:.....V:.....	Item		
Carried to Collection			N\$	
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Clause 60: Property F:.....T:.....V:.....	Item		
B	Clause 61: Release from Performance F:.....T:.....V:.....	Item		
<u>SPECIFIC PRELIMINARIES</u>				
C	Samples of materials The contractor shall furnish at his own cost such samples of materials and specimens of colours as may be called for by the Project Manager for his approval. F:.....T:.....V:.....	Item		
D	Samples of workmanship and mockups The contractor shall furnish such samples of workmanship as may be called for by the Project Manager for his approval. Where an assembly of various elements of the buildings is required, which is not incorporated in the works, this shall be arranged by the contractor. Any cost involved shall be borne by the employer. F:.....T:.....V:.....	Item		
E	Ordering of materials Should the Bills of Quantities be used for ordering materials, this shall be entirely at the contractor's risk. F:.....T:.....V:.....	Item		
			</	

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<p>A</p> <p>Enclosure of works</p> <p>The contractor shall provide, erect, alter as necessary, maintain and remove and make good at completion suitable hoardings complete with gantries, fans, safety screens, barriers, access gates, covered gangways, steel sections at crane lifts, splayed corners, returned ends, etc. all as necessary for the enclosure of the works and the protection of the general public and others.</p> <p>The contractor shall pay and recover all deposits and pay all fees and charges in connection with the hoarding and the use of the pavements throughout the whole course of the contract, all in accordance with any Act of Parliament, regulation or by-law of any local authority.</p> <p>F:.....T:.....V:.....</p>		<p>Item</p>		
<p>B</p> <p>Pavement crossings and parking meters</p> <p>The contractor shall pay and recover all deposits and pay all fees and charges in connections with and/or obtain permission for the suspension of parking facilities and for pavement or street encroachment and or crossings and the removal and eventual reinstatement of any local authority's parking meters</p> <p>F:.....T:.....V:.....</p>		<p>Item</p>		
<p>C</p> <p>Special scaffolding</p> <p>No special scaffolding is measured as these Bills of Quantities are based on the sixth edition of the Standard System for Measuring Building Work.</p> <p>The Contractor shall provide, maintain and remove on completion special scaffolding for areas exceeding 5m above floor level, for use of all trades, as defined under the "Description of the Works".</p> <p>F:.....T:.....V:.....</p>		<p>Item</p>		
<p style="text-align: right;">Carried to Collection</p> <p>Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025</p>			<p>N\$</p>	

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Contractor's offices and sheds				
	<p>The contractor shall provide and maintain temporary sheds and offices for the proper storage of materials and for the use of the workmen and shall remove such temporary sheds and offices on completion.</p> <p>F:.....T:.....V:.....</p>	Item			
B	Offices				
	<p>The contractor shall provide, maintain and remove on completion office accommodation for meetings held on site. The office shall be provided with tables and chairs sufficient for the maximum number of persons attending meetings and shall be kept clean.</p> <p>F:.....T:.....V:.....</p>	Item			
C	Main notice board				
	<p>The contractor shall provide, erect where directed, maintain and remove on completion the main noticeboard complying with the requirements of the Institute of Namibian Architects, with the title of the project and the names of the employer, the architect, the quantity surveyor, the consulting engineers and the contractor signwritten thereon.</p> <p>F:.....T:.....V:.....</p>	Item			
D	Water				
	<p>The contractor shall provide all water for the works, including all necessary temporary plumbing, removing same and making good on completion.</p> <p>F:.....T:.....V:.....</p>	Item			
E	Electricity and lighting				
	<p>The contractor shall provide all necessary electricity and artificial lighting for the works, including all necessary temporary installation work, removing same and making good on completion.</p> <p>F:.....T:.....V:.....</p>	Item			
Carried to Collection			N\$		
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

A	Telephones				
	The contractor shall provide, maintain and remove on completion a PT telephone on site for use by all persons engaged upon the works and shall be entitled to recover the cost of outgoing calls from those making them.				
	F:.....T:.....V:.....	Item			
B	Toilets				
	The contractor shall provide, maintain in a thoroughly clean and tidy condition proper toilets for the use of the workmen and remove same on completion.				
	F:.....T:.....V:.....	Item			
Carried to Collection				N\$	
Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

<p>A Payment of preliminaries</p> <p>The amount to be included in each monthly certificate in respect of preliminaries costs shall be calculated from the priced items within the preliminaries section of the bills of quantities.</p> <p>The contractor and project manager shall agree a division of the priced preliminaries items into:</p> <ol style="list-style-type: none"> 1. An initial or establishment charge, payment of which shall be made to the contractor on proof that the relevant expenditures have been made; 2. A monthly charge, and 3. A final or dis-establishment charge <p>Should the contractor and project manager be unable to agree such division then the project manager shall make a fair and reasonable division.</p> <p>In arriving at such division cognisance shall be taken of such factors as:</p> <ol style="list-style-type: none"> 1. Premiums for policies of insurance and performance guarantees being renewable annually, 2. Plant, scaffolding and the like remaining the property of the contractor or the hiring company and the capital cost thereof not being treated as part of the initial charge. <p>In the event of an extension of time for the completion of the works the monthly charge be recalculated on the same basis as originally but taking into account the revised contract period and the amounts already paid to the contractor.</p> <p>F:.....T:.....V:.....</p>	<p>Item</p>		
<p>Carried to Collection</p> <p>Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025</p>		<p>N\$</p>	

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	<p>Protection</p> <p>The contractor shall provide for the protection of all work for which a certificate of practical completion has not been issued and which is liable to be damaged from any cause. The contractor shall be responsible for any damage which may occur and shall make good at his own expense.</p> <p>F:.....T:.....V:.....</p>	Item		
B	<p>Protection of existing and/or partially occupied works</p> <p>The contractor shall provide all reasonable measures necessary to protect the existing and/or partially occupied works to ensure that they are not damaged and he shall remove such protection on completion.</p> <p>F:.....T:.....V:.....</p>	Item		
C	<p>Site security</p> <p>The contractor shall provide all watching and lighting necessary for general site security.</p> <p>F:.....T:.....V:.....</p>	Item		
D	<p>Notice before covering work</p> <p>The contractor shall give adequate notice to the project manager whenever any work or materials which are subjected to the project manager's inspection or remeasurement are to be covered in or concealed in any way. In default of such notice being received such work or materials shall be uncovered and later made good at the contractor's expense.</p> <p>F:.....T:.....V:.....</p>	Item		
E	<p>Disturbance</p> <p>The contractor shall execute the whole of the works with a minimum of disturbance to the adjoining premises, any parts of the works already handed over and the occupants of those premises and/or parts.</p> <p>F:.....T:.....V:.....</p>	Item		
	<p style="text-align: right;">Carried to Collection</p>		N\$	
	<p>Bill No. 1 Preliminaries Jordaan & Associates Quantity Surveyors April 2025</p>			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	<p>Clearing and cleaning</p> <p>The contractor shall regularly clean and clear away all rubbish and excess materials as the works proceed and, on completion, leave the works in a clean and satisfactory state for immediate use and occupation.</p> <p>F:.....T:.....V:.....</p>	Item		
B	<p>Vermin</p> <p>The contractor shall take all necessary precautions to keep the works and site free from vermin during construction and shall leave the works vermin free on completion.</p> <p>F:.....T:.....V:.....</p>	Item		
C	<p>Workmen's Compensation Insurance.</p> <p>The Contractor and domestic sub-contractors shall insure workmen in terms of the Employee Compensation Act 5 of 1995 and shall deposit immediately with the Project Manager written confirmation of evidence of registration under the Workmen's Compensation Act when signing the Contract.</p> <p>Persons not falling under the above mentioned Act must be insured under individual Personal Accident Insurance policies to the satisfaction of the Project Manager.</p> <p>F:.....T:.....V:.....</p>	Item		
D	<p>Open Fires.</p> <p>No open fires will be permitted except in such places as are approved by the Project Manager. Any workmen or labourers lighting fires in unauthorised places are to be immediately dismissed.</p> <p>F:.....T:.....V:.....</p>	Item		
	<p style="text-align: right;">Carried to Collection</p>		N\$	

Bill No. 1
Preliminaries
**Jordaan & Associates Quantity
Surveyors April 2025**

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	<p>Blasting</p> <p>The Contractor shall take all responsibility during blasting operations, should any be necessary, and must observe all conditions set forth in Government and Local Authority Regulations. The use of explosives is left to the discretion of the Contractor who must indemnify the Employer against any claims for damages to persons or property on or near the site from any cause whatsoever arising out of the use of explosives. The Contractor will be held solely responsible for and must immediately make good, at his own expense, any damage that may occur through the use of explosives.</p> <p>F:.....T:.....V:.....</p>	Item		
B	<p>As built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the architect and the structural engineer for their records.</p> <p>The contractor shall furnish the Project Manager with a set of marked drawings indicating the positions of all plumbing and drainage pipe work as actually built.</p> <p>F:.....T:.....V:.....</p>	Item		
C	<p>Protection of trees</p> <p>Only those trees as are indicated by the Project Manager shall be removed. All other trees are to be protected during the building operations and no workmen may damage these trees in any way. The Contractor is to note that some trees may occur within the area of building operations. Before removing such trees, the Contractor is to obtain specific instructions from the Project Manager as whether such trees may be removed or not.</p> <p>F:.....T:.....V:.....</p>	Item		

Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 1</u>			
<u>ALTERATIONS (PROVISIONAL)</u>			
<u>NOTES:</u>			
1. The Bidder is advised to refer to Trade Preamble before pricing this Bill 2. The Bidder shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the Project Manager 3. Before submitting his Bid the Bidder shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained 4. No explosives whatsoever may be used for demolition purposes unless otherwise stated			
<u>REMOVAL OF EXISTING WORK</u>			
<u>Breaking up or breaking down and removing concrete</u>			
A	Demolish concrete columns, walls, beams, slabs etc	m3	10
B	Removal of interlocked pavers, to put new (elsewhere measured)	m2	173
Carried to Collection			N\$
Bill No. 1 Alterations Jordaan & Associates Quantity Surveyors April 2025			

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	Demolish surface beds not exceeding 150mm thick <u>Breaking up or breaking down and removing natural stone walls</u>	m3	18		
B	Demolish half brick wall <u>Taking out and removing steel doors and timber frames and make good to finishes to receive new doors and frames (doors and frames elsewhere measured)</u>	m2	82		
C	Steel door size 813mm wide x 1 900mm high overall hung to timber frame <u>Taking out and removing sanitary fittings and appliances, including taps and traps, including disconnecting piping from fittings and cutting back and sealing off all water and waste pipes as necessary</u>	No	8		
D	Remove water closet	No	15		
E	Remove urinals <u>Taking down and removing roofs, etc</u>	No	13		
F	Fibrecement or metal roof sheeting including flashings, ridges, etc (measured on flat to affected roof area on slope) <u>Take down and remove existing timber fence around lifting station</u>	m2	120		
G	1 200mm High timber fence, including posts, etc <u>Take out existing shower heads and prepare end of water pipe to receive new shower heads</u>	m	28		
H	Take out existing shower heads (new shower heads elsewhere measured) <u>Carefully take out and store for later reuse ceiling boarding fixed on the underside of purlins</u>	No	2		
J	Marine plyboard ceiling (fixing plyboards elsewhere measured)	m2	116		
				N\$	
Carried to Collection					
Bill No. 1 Alterations Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

[illegible]

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.</u></p> <p><u>2 BILL NO. 2</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>NOTES:</u></p> <ol style="list-style-type: none"> 1. The Bidder is advised to refer to Trade Preambles before pricing this Bill. 2. The nature of the ground to be excavated is believed to be sandy soil. Despite this statement, the responsibility is on the Bidder to satisfy himself as to the nature of the ground conditions to be excavated and to allow accordingly in his prices. 3. "Hard rock" shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives. 4. "Soft rock" shall mean hard material the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness. 5. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect. <p>-----</p>			
<p style="text-align: right;">Carried to Collection</p>			<p>N\$</p>
<p>Bill No. 2 Earthworks (Provisional) Jordaan & Associates Quantity Surveyors April 2025</p>			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

EXCAVATIONS

Excavations in trenches and holes

Excavate in "earth" not exceeding 2m deep below average natural ground level for:

A	Trenches	m3	22	
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CARTING AWAY

Extra over all excavations for:

B	Loading and carting away surplus excavated material to a suitable dumping ground to be located by the Contractor	m3	12	
---	--	----	----	--

RISK OF COLLAPSE OF EXCAVATIONS

Risk of collapse to side of excavation in "earth" not exceeding 1,5m deep starting from average natural, reduced or consolidated filled ground level for:

C	Trenches and holes	m2	77	
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KEEPING EXCAVATIONS FREE FROM WATER

D	Allow for keeping excavations free from water		Item	
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FILLING, ETC.

Selected material obtained from excavations

Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:

E	Backfilling to trenches, holes for column bases, etc.	m3	11	
---	---	----	----	--

Soilcrete backfilling comprising 5% cement and 95% approved materials from the excavations

F	Soilcrete backfilling to trenches, holes, etc under footings, bases, etc	m3	4	
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Carried to Collection

N\$

Bill No. 2

Earthworks (Provisional)

Jordaan & Associates Quantity

Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Imported material</u>					
<u>Selected material supplied by the Contractor in filling under floors and spread, level, water and compact in layers not exceeding 150mm and trim to level:</u>					
A	G7 material compacted to not less than 95% of the modified AASHTO maximum density	m3	26		
B	G5 material compacted to not less than 98% of the modified AASHTO maximum density	m3	44		
<u>Clean, dry, coarse river sand evenly spread and compacted under solid floors to receive waterproofing membrane (solid floor & waterproofing membrane elsewhere)</u>					
C	50mm Thick layer	m3	6		
<u>COMPACTION</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>					
D	Bottoms of trenches	m2	33		
E	Under floors	m2	132		
<u>WEEDKILLERS, INSECTICIDES, ETC.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>					
F	Sides and under foundation footings and bases	m2	110		
G	Under solid floors	m2	132		
Carried to Collection				N\$	
Bill No. 2 Earthworks (Provisional) Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 2

Bill No. 2

Earthworks (Provisional)

COLLECTION

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Bill No. 2

Earthworks (Provisional)

**Jordaan & Associates Quantity
Surveyors April 2025**

Item No	Quantity	Rate	Amount																
<p><u>BILL NO. 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>NOTES:</u></p> <p>1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.</p> <p>2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.</p> <p>-----</p> <p><u>CONCRETE</u></p> <p><u>Test Cubes</u></p> <p><u>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)</u></p> <tr> <td>A</td><td>Making and testing 150mm x 150mm x 150mm concrete strength test cube</td><td>No</td><td>12</td></tr> <tr> <td colspan="4"> <p><u>Unreinforced concrete cast against excavated surfaces</u></p> <p><u>Grade 25MPa/19mm concrete with 25% fly ash in:</u></p> <tr> <td>B</td><td>Strip footings (provisional)</td><td>m3</td><td>5</td></tr> <tr> <td colspan="3"> <p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p> </td><td> <p>N\$</p> </td></tr> </td></tr>				A	Making and testing 150mm x 150mm x 150mm concrete strength test cube	No	12	<p><u>Unreinforced concrete cast against excavated surfaces</u></p> <p><u>Grade 25MPa/19mm concrete with 25% fly ash in:</u></p> <tr> <td>B</td><td>Strip footings (provisional)</td><td>m3</td><td>5</td></tr> <tr> <td colspan="3"> <p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p> </td><td> <p>N\$</p> </td></tr>				B	Strip footings (provisional)	m3	5	<p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p>			<p>N\$</p>
A	Making and testing 150mm x 150mm x 150mm concrete strength test cube	No	12																
<p><u>Unreinforced concrete cast against excavated surfaces</u></p> <p><u>Grade 25MPa/19mm concrete with 25% fly ash in:</u></p> <tr> <td>B</td><td>Strip footings (provisional)</td><td>m3</td><td>5</td></tr> <tr> <td colspan="3"> <p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p> </td><td> <p>N\$</p> </td></tr>				B	Strip footings (provisional)	m3	5	<p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p>			<p>N\$</p>								
B	Strip footings (provisional)	m3	5																
<p>Carried to Collection</p> <p>Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025</p>			<p>N\$</p>																

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Reinforced concrete cast against excavated surfaces</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
A	Strip footings (provisional)	m3	3		
<u>Reinforced concrete cast on surfaces of compacted fill</u>					
<u>Grade 60MPa/19mm concrete with 25% fly ash in:</u>					
B	Surface beds	m3	19		
<u>Reinforced concrete cast on/in formwork</u>					
C	Isolated beams, wall beams and ring beams	m3	1		
<u>Grade 40MPa/19mm reinforced concrete with 25% fly ash in:</u>					
D	Roof slabs, including attached beams and inverted beams	m3	5		
E	Counter slabs	m3	1		
<u>Surface treatment</u>					
<u>Finishing top surfaces of concrete smooth</u>					
F	With a steel float	m2	157		
<u>Drip grooves etc,</u>					
<u>50mm Drip moulding groove to:</u>					
G	Edge of concrete	m	19		
Carried to Collection				N\$	
Bill No. 3 Concrete, Formwork and Reinforcement Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

FORMWORK

Rough formwork (Degree of accuracy III)

Rough formwork to soffits of:

A	Slabs, exceeding 1.5m and not exceeding 3.5m above bearing level	m2	25	
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REINFORCEMENT

Rebar, including hoisting or lowering and fixing in position, executed complete

Mild/high tensile steel reinforcement to structural concrete work

B	All diameter bar reinforcement (up to 20mm in diameter)	t	0.7	
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Galvanized fabric reinforcement

Having a surface that is plain, indented or otherwise deformed

C	Welded steel fabric Ref. 245 reinforcement	m2	157	
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Carried to Collection

N\$

Bill No. 3
Concrete, Formwork and Reinforcement
Jordaan & Associates Quantity
Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Item No		Quantity	Rate	Amount
	<u>BILL NO. 4</u>			
	<u>MASONRY</u>			
	<u>NOTES:</u>			
	1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.			
	2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.			

	<u>MASONRY</u>			
	<u>Brickwork in foundations (provisional)</u>			
	<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>			
A	Half brick wall	m2	16	
B	330mm Brick wall	m2	8	
	<u>Superstructure brickwork</u>			
	<u>Ordinary brickwork in solid concrete masonry units having a compressive strength of 14MPa in Class II cement mortar</u>			
C	Half brick wall	m2	90	
	<u>Brickwork in 40MPa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>			
D	One brick wall	m2	38	
	Carried to Collection			
			N\$	
	Bill No. 4 Masonry Jordaan & Associates Quantity Surveyors April 2025			

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

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CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 2

Bill No. 4

Masonry

COLLECTION

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Bill No. 4

Masonry

Jordaan & Associates Quantity
Surveyors April 2025

N\$

Item No		Quantity	Rate	Amount
	BILL NO. 5			
	<u>WATERPROO</u>			
	<u>FING NOTES:</u>			
	1. The Bidder is advised to refer to Trade Preambles before pricing this Bill. 2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.			

	<u>DAMP PROOF COURSE</u>			
	<u>One layer of 375 micron "Gundle Brikgrip DPC" or similar approved embossed damp proof course</u>			
A	Damp proof course laid on walls etc.	m2	8	
	<u>SHEET OR MEMBRANE WATERPROOFING</u>			
	<u>Waterproofing to floors</u>			
	<u>One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>			
B	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	132	
	Carried to Collection			N\$
	Bill No. 5 Waterproofing Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Waterproofing to roofs

Prepare and apply three coats "Hempadur Mastic 45880" or similar and approved waterproofing paint and one coat "Hempathane 55210" or similar approved topcoat in strict accordance to manufacturers specifications on:

A	Concrete roof slabs to falls	m2	25	
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WATERSTOPS, JOINT SEALANTS, ETC.

Joint sealants

B	Fill 10mm wide x 20mm deep saw cut joint in top of concrete surface bed with approved polysulphide sealant	m	8	
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C	10mm x 10mm "11-FC Sikaflex" or similar approved sealing compound in expansion joints between brick surfaces including raking out expansion joint filler as necessary	m	5	
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Carried to Collection

N\$

Bill No. 5

Waterproofing

Jordaan & Associates Quantity

Surveyors April 2025

Item No	Quantity	Rate	Amount
<u>BILL NO. 6</u>			
<u>ROOF COVERINGS, ETC.</u>			
<u>NOTES:</u>			
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill. 2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect. -----			
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>Roof coverings</u>			
<u>0.7mm Thick Brown Built "Klip-Lok 406" or similar approved profiled aluminium roof sheeting in single lengths with "Chromadek" or similar approved coating to both surfaces in approved colours, fixed to timber purlins, all in strict accordance with the manufacturer's instructions</u>			
A	Roof covering with pitch not exceeding 25 degrees	m2	93
<u>0.7mm Thick translucent "Klip-Lok 406" or similar approved profiled polycarbonate translucent roof sheeting in single lengths, fixed to timber purlins, all in strict accordance with the manufacturer's instructions</u>			
B	Roof covering with pitch not exceeding 25 degrees	m2	27
Carried to Collection			N\$
Bill No. 6 Roof Coverings, etc. Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Sundries</u>					
A	Narrow and broad flute polyclosers to suit "Klip-Lok 406" or similar approved profile	m	16		
<u>Flashings</u>					
<u>0.8mm Thick "Brownbuilt Klip-Lok 406" or similar approved flashing with "Chromadek" or similar approved coating to upper surfaces in approved colours</u>					
B	Sidewall flashing 375mm girth, three times bent notched on site to suit roof profile	m	16		
C	Apex flashing 375mm girth, three times bent and notched on site to suit roof profile	m	32		
D	Purpose made fascias 375mm girth, three times bent and notched on site and screwed to timber purlin to suit roof	m	48		
<u>ROOF AND WALL INSULATION</u>					
<u>"Sisalation FR430" or similar approved heavy industrial fire retardant aluminium foil insulation</u>					
E	Insulation laid taut over purlins and fixed concurrent with roof covering to timber purlins (elsewhere measured) with and including galvanised steel straining wires, all cutting and waste, labours and dressings and holing or cutting and sealing around pipes, all in accordance with the manufacturer's instructions (measured nett)	m2	120		
Carried to Collection				N\$	
Bill No. 6 Roof Coverings, etc. Jordaan & Associates Quantity Surveyors April 2025					

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Item No	Quantity	Rate	Amount
<u>BILL NO. 7</u>			
<u>CARPENTRY AND JOINERY</u>			
<u>NOTES:</u>			
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.			
2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.			
3. All joinery is to be wrot on all surfaces unless otherwise described.			

<u>CARPENTRY & JOINERY</u>			
<u>TIMBER ROOF STRUCTURE</u>			
<u>Sawn softwood grade 5 nailed with approved roof screws grade A2 stainless steel</u>			
A	50 x 100mm Timber in joists, etc	m	19
B	50 x 75mm Timber in purlins, etc	m	136
C	38 x 114mm Timber in wall plates, etc	m	101
D	50 x 150mm Timber in rafters, etc	m	187
Carried to Collection			N\$
Bill No. 7 Carpentry and Joinery Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

ROOF BOARDING

Marine plyboard (elsewhere removed) fixed to underside of timber purlins according to Architect's instructions

A	Take from store and fix 22mm thick tongued and grooved roof boarding in 100mm widths, nailed to timber trusses at not exceeding 1 000mm centres	m2	116
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DOORS, WINDOWS, SASHES, ETC.

100 x 70mm Hardwood timber door frame rigidly fixed into opening with "Sikaflex-11C" or similar approved sealant to :

B	Frame size 953mm x 1 970mm high overall	No	8
	<u>Purpose made hardwood single door with 80mm door undercut suitable for painting, hung to 100mm x 70mm timber door frame rigidly fixed into opening with "Sikaflex-11C" or similar approved sealant</u>		8
C	44mm Thick door size 813mm x 2 056mm high overall	No	1
D	44mm Thick door size 830mm x 2 037mm high overall	No	

Carried to Collection

N\$

Bill No. 7
Carpentry and Joinery
Jordaan & Associates Quantity Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Item No			Quantity	Rate	Amount
	<u>BILL NO. 8</u>				
	<u>IRONMONGERY</u>				
	<u>NOTES:</u>				
	1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.				
	2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.				
	3. All items are fixed to timber unless otherwise stated.				

	<u>HINGES, BOLTS, ETC.</u>				
	<u>Steel hinges</u>				
A	76mm x 100mm x 3mm Stainless steel double ball bearing butt hinges with clear PVD (code FH76X3B-TR)	Pairs	1.0		
	<u>CATCHES, CABIN HOOKS, ETC.</u>				
	<u>"CISA" or similar approved</u>				
B	Stainless steel hat and coat hook (code FHACH02)	No	1		
C	Stainless steel door stop (code FDS01)	No	1		
	<u>Purchase, transport to site, store, protect and fix door latch to door including all necessary screws, etc (refer to Architect's Drawing DT-23)</u>				
D	Approved door timber latch (Prime Cost N\$ 500.00 each)	No	8		
	Carried to Collection				N\$
	Bill No. 8 Ironmongery Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

HANDLES

"CISA" or similar approved

A	Stainless steel pull handle pair with WC indicator and turn (code FPD6.WC.R), including stainless steel striking plate	No	1	
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BATHROOM FITTINGS

"Franke" or similar approved

B	Stainless steel single toilet roll holder "CHRX675" (code 2120064)	No	16	
C	32mm Diameter "Franke CNTX 21" (code 359880) or similar approved grab rail plugged and screwed to wall with and including stainless steel screws	No	2	
D	32mm Diameter "Franke CNTX 600" (code 359872) or similar approved grip angle bars plugged and screwed to side wall with and including stainless steel screws	No	2	

Carried to Collection

N\$

Bill No. 8
Ironmongery
Jordaan & Associates Quantity
Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 2

Bill No. 8

Ironmongery

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Bill No. 8

Ironmongery

**Jordaan & Associates Quantity
Surveyors April 2025**

Item No		Quantity	Rate	Amount
<u>BILL NO. 9</u>				
<u>METALWORK</u>				
<u>NOTES:</u>				
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill. 2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect. -----				
<u>STAINLESS STEEL SUNDRIES</u>				
<u>Fog Collection Point</u>				
A	75mm x 50mm Stainless steel L-shaped fog collection frame with single layer of "Denkendorf" or similar approved mesh wrapped around 50mm aluminium flat bar with rounded edges fixed to 50mm stainless steel frame (refer to Architect Drawing DT-27)	No	5	
<u>Burglar bars</u>				
<u>20mm Round stainless steel burglar bars evenly spaced at 95mm centres and drilled into wall and sealed with "Epoxi" or similar approved glue to suit:</u>				
B	Window opening size 600mm x 800mm high overall	No	3	
C	Window opening size 1 598mm x 1 000mm high overall	No	2	
Carried to Collection				N\$
Bill No. 9 Metalwork Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

PURPOSE MADE STEEL DOORS AND FRAMES

30mm Stainless steel square tubing frame including 10mm 3C12 stainless steel rods at 95mm centers welded to frame; 6mm 3C12 stainless steel sheet welded to both the interior and exterior of the perimeter of the frame including "CISA" double throw deadbolt (code 420M38); (refer to Architect's Drawing No. DS-01 and DT-65)

A	Size 813mm wide x 1 900mm high overall	No	8
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ALUMINIUM, DOORS, WINDOWS, ETC.

Window units

Purpose made charcoal powder coated "HBS Nuklip" aluminium window unit or similar approved profiles, factory glazed with 4mm "DecorVue Obscure Stipolyte Glass" or similar approved complete with gaskets, glazing beads, handles, draft seals, rubber buffers, suitable hinges, including setting up and fixing in position, plugging and screwing to brickwork or concrete and sealing all round on both sides with "Sikaflex-11FC" or similar approved silicone sealant

B	Glazed aluminium window size 600mm wide x 800mm high; (refer to Architect's Drawing No. WS-02)	No	3
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C	Glazed aluminium window size 1 598mm wide x 1 000mm high; (refer to Architect's Drawing No. WS-01)	No	2
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Carried to Collection

N\$

Bill No. 9

Metalwork

Jordaan & Associates Quantity

Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Doors

Purpose made aluminium "HBS Nuklip" door units or similar approved profiles, factory glazed with 6.76mm "Intruderprufe" or similar approved "Laminated Safety Glass", complete with gaskets, glazing beads, handles, draft seals, rubber buffers, suitable hinges, etc. including setting up and fixing in position, plugging and screwing to brickwork or concrete and sealing all round on both sides with "Sikaflex -11FC" approved silicone sealant

- A Size 893mm wide x 2 100mm high overall full pane hinged single door with laminated safety glass including 2 x natural anodised double hinges (code HCD056N), complete with the following ironmongery as supplied by "CISA" or similar approved; "CISA" euro- profile cylinder lock with latch and long throw dead bolt including stainless steel face and strike plate (code 44820-35-20); 59mm euro-profile double cylinder master keyed (code 0G300-07-12-MK); one pair CISA slimline aluminium handle (code H28SN); (refer to Architect's Drawing No. DS-04)

No

1

Purpose made charcoal powder coated aluminium "HBS Nuklip" door frame or similar approved profiles, complete with suitable hinges, etc. including setting up and fixing in position, plugging and screwing to brickwork or concrete and sealing all round on both sides with "Sikaflex -11FC" approved silicone sealant

- B Size 893mm wide x 2 100mm high overall

No

1

Carried to Collection

N\$

Bill No. 9

Metalwork

Jordan & Associates Quantity

Surveyors April 2025

Item No		Quantity	Rate	Amount
<u>BILL NO. 10</u>				
<u>PLASTERING</u>				
<u>NOTES:</u>				
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.				
2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.				

<u>GRANOLITHIC FINISH</u>				
<u>Untinted cement granolithic finish</u>				
A	30mm Thick screed on floors	m2	25	
B	75mm High skirting with coved finish at wall joint	m	16	
<u>CEMENT PLASTER</u>				
<u>Externally</u>				
<u>12mm Thick block brush cement plaster to brickwork on:</u>				
C	Walls	m2	32	
<u>Internally</u>				
<u>15mm Thick cement plaster finished smooth with a steel float to brickwork on:</u>				
D	Walls	m2	21	
E	Narrow widths	m2	4	
Carried to Collection				N\$
Bill No. 10 Plastering Jordaan & Associates Quantity Surveyors April 2025				

12mm Thick cement plaster finished smooth with a steel float to concrete on:

DIVIDING STRIPS, CORNER PROTECTORS, METAL BEADS, ETC.

Weather strips, etc.

B	70mm x 3mm Brass weather strip with top flush with floor finish	m	1
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Item No	Quantity	Rate	Amount
<u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u> <u>BILL NO. 11</u> <u>NOTES:</u> 1. The Bidder is advised to refer to Trade Preamble before pricing this Bill. 2. The nature of the ground to be excavated is believed to be sandy soil. Despite this statement, the responsibility is on the Bidder to satisfy himself as to the nature of the ground conditions to be excavated and to allow accordingly in his prices. 3. "Hard rock" shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives. 4. "Soft rock" shall mean hard material the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness. 5. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect. ----- <u>RAINWATER DISPOSAL</u> <u>"Saint Gobain" or similar approved roof outlet</u> A 100mm Diameter cast iron full bore roof outlet (code 3585) with round top set in top of concrete slab and set flush with top of slab finish <div style="text-align: right;">No 1</div>			
Carried to Collection			N\$
Bill No. 11 Plumbing and Drainage (Provisional) Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>uPVC Pipes class 9</u>					
A	75mm Diameter rainwater pipes with holder bats spaced at not exceeding 1,5m centres built into brick work	m	3		
<u>Extra over uPVC pipes for fittings</u>					
B	Extra over 75mm diameter rainwater pipe for shoe	No	1		
<u>SANITARY FITTINGS, TANKS, GEYSERS, ETC.</u>					
Note:					
All sanitary fittings are to be sealed all round with an approved silicone sealant where they abut against other surfaces.					
<u>Stainless steel</u>					
<u>"Franke" or similar approved</u>					
C	"Barron" stainless steel urinal (code 2540056) with top inlet fixed to wall with and including two hanger brackets and supplied complete with 40mm stainless steel domical grating and spreader	No	13		
D	"HCL" stainless steel floor mounted WC pan (code 2540154) installed to manufacturer's specifications and Architect's approval	No	15		
<u>"Cobra" or similar approved</u>					
E	20mm "Junior Flushmaster FJT5.5" chrome plated flush valve including urinal pipe offset (code FJT5.4)	No	13		
<u>Plastic</u>					
<u>"Atlas" or similar approved</u>					
F	"Cindy" basin (code 384APG), size 400mm x 300mm with one tap hole including integrated overflow and chain stay hole, complete with plug, chain and stay	No	1		
Carried to Collection				N\$	
Bill No. 11 Plumbing and Drainage (Provisional) Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

TAPS, VALVES, ETC.

"Pro- Close" or similar approved

A	22mm Brass garden bib tap	No	1	
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Chromium plated

"Schloeser" or similar approved

B	Angle valve with sliding wall flange (code 7111), including "Aquatouch" or similar approved 450mm long stainless steel flexi connector (code SA30)	No	16	
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WASTE UNIONS, TRAPS, ETC.

Waste Union

C	"Cobra" or similar approved sink waste (code 317-40)	No	1	
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Traps

Purchase, transport to site, store, protect and install bottle trap to sanitary fitting, including accessories, sealants, etc

D	Approved bottle trap (Prime Cost N\$ 300.00 each)	No	1	
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Carried to Collection

N\$

Bill No. 11
Plumbing and Drainage (Provisional)
Jordaan & Associates Quantity
Surveyors April 2025

Item No	Quantity	Rate	Amount
<u>BILL NO. 12</u>			
<u>PAINTWORK</u>			
<u>NOTES:</u>			
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill.			
2. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.			
3. Unless otherwise specified, all paintwork shall be deemed to have a colour group value of 40% White, 30% Pastel, 20% Deep and 10% Transparent in accordance with the Natural Colour System (NCS) adopted by the South African National Standards. Bidders are to average their prices on these ratios.			

Carried to Collection			N\$
Bill No. 12 Paintwork Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

PAINTING TO EXISTING WORK

ON SMOOTH PLASTERED SURFACES

Previously painted walls, etc.

Prepare and apply one coat "Promac Bonding Liquid Nanotech" or similar approved bonding liquid and two coats "Plascon Micatex" or similar approved textured PVA paint in colour NAMIB (code BBO 31)

A	Smooth plastered walls	m2	42	
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Prepare and apply two coats "White Peralin Perarol" or similar approved block brush paint in strict accordance with manufacturer's specifications on:

B	Plastered surfaces	m2	32	
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ON WOOD SURFACES

Prepare knot and apply two coats "Peralin B-30 Pera Seal" or similar approved sealer, make good with Plascon Woodcare" or similar approved woodfiller and apply two coat "White Peralin EG Gloss PVA" or similar approved strictly to manufacturer's specification on:

C	Timber surfaces	m2	26	
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Prepare knot and apply two coats "Peralin B-30 Pera Seal" or similar approved sealer, make good with Plascon Woodcare" or similar approved woodfiller and apply two coat "Dulux Woodgard Exterior Marine" or similar approved timber varnish strictly to manufacturer's specification on:

D	Timber surfaces	m2	14	
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RATE ONLY

RATE ONLY

Carried to Collection

N\$

Bill No. 12

Paintwork

Jordaan & Associates Quantity
Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	<u>Sand down, clean down, prepare and apply one coat "Xyladecor" or similar approved wood primer and two coats "Xyladecor Holzschutz-Laser" or similar approved varnish strictly to manufacturer's specification on:</u>	m2	132	RATE ONLY
	Timber surfaces			
B	<u>PLASTIC SURFACES</u>	m2	5	RATE ONLY
	<u>Degrease, clean, prepare and apply "Plascon Aquasolve" or similar approved degreaser to remove surface contaminants; apply one coat "Self Etch Zinc Chromate Wash Primer" and apply one coat "Merit Universal Undercoat; finish with two coats " Super Universal Enamel" in strict accordance with manufacturers specifications paint on:</u>			
C	<u>PAINTING TO NEW SURFACES</u>	m2	21	
	<u>ON SMOOTH PLASTERED SURFACES</u>			
D	<u>Prepare and apply one coat "Pera Aquaprime" primer or similar approved and two coats "Peralin EAG" or similar approved PVA paint on:</u>	m2	27	
	Internal smooth plastered walls			
	<u>WOOD SURFACES</u>	m2		
	<u>Sand down, clean down, make good with "Pera Mastix" or similar approved, prepare and apply two coat "Peralin B-30 Pera Seal" or similar approved sealer and two coats "Peralin EG Pera Gloss" or similar approved PVA strictly to manufacturer's specification on:</u>			
	General surfaces of doors, etc			
Carried to Collection			N\$	
Bill No. 12 Paintwork Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<p><u>Prepare and apply two coats "PERALIN B-30 PERA SEAL" or similar approved primer; make good with "PLASCON " wood filler (WFP0) and apply two coats "PERALN EAG PERA PLATINUM EXECUTIVE" or similar approved paint on:</u></p>					
A	General surfaces of doors, etc	m2	4		
<p><u>METAL SURFACES</u></p> <p><u>Sand down, clean, prepare and apply "Peralin Metal Cleaner MXC" or similar approved cleaner to remove surface contaminants. Apply one coat "Peralin Metal Primer", rust beater primer and finish with "Peralin Direct" or similar approved paint on:</u></p>					
B	Steel doors and gates	m2	37		
<p style="text-align: right;">Carried to Collection</p>					
<p>Bill No. 12 Paintwork Jordaan & Associates Quantity Surveyors April 2025</p>					
				N\$	

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 2

Bill No. 12

Paintwork

COLLECTION

Total Brought Forward

**Page
No**

54

Total Brought Forward

55

Total Brought Forward

56

Total Brought Forward

57

Amount

Carried Forward to Summary of Section No. 2

N\$

Bill No. 12

Paintwork

**Jordaan & Associates Quantity
Surveyors April 2025**

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

Bill No	SECTION SUMMARY - Builder's Works	Page No	Amount
1	Alterations	19	
2	Earthworks (Provisional)	23	
3	Concrete, Formwork and Reinforcement	27	
4	Masonry	30	
5	Waterproofing	33	
6	Roof Coverings, etc.	36	
7	Carpentry and Joinery	39	
8	Ironmongery	42	
9	Metalwork	46	
10	Plastering	49	
11	Plumbing and Drainage (Provisional)	53	
12	Paintwork	58	
Carried to Final Summary			N\$
Jordaan & Associates Quantity Surveyors April 2025			

Item No	Quantity	Rate	Amount
<u>SECTION NO.</u>			
<u>3 BILL NO. 1</u>			
<u>SITE PLUMBING (PROVISIONAL)</u>			
<u>NOTES:</u>			
1. The Bidder is advised to refer to Trade Preambles before pricing this Bill. 2. It is the responsibility of the Bidder to satisfy himself as to the nature of the ground conditions to be excavated and to allow accordingly in his prices. 3. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect. -----			
<u>SOIL DRAINAGE</u>			
<u>uPVC heavy duty pipes class 34</u>			
A	110mm Diameter pipes laid in and including trenches not exceeding 1m deep	m	155
B	160mm Diameter pipes laid in and including trenches not exceeding 1m deep	m	225
<u>Extra over heavy duty uPVC sewer pipes for the following fittings</u>			
C	110mm Long radius bend	No	4
Carried to Collection			N\$
Bill No. 1 Site Plumbing (Provisional) Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

VALVE CHAMBERS, MANHOLES, ETC.

Note:

1. All inspection chambers are to be built in accordance with SABS 1200.

CONCRETE MANHOLES

In situ concrete inspection chambers circular on plan including excavation, concrete, reinforcement, step irons, etc. complete (covers elsewhere measured)

Inspection chambers formed of 150mm thick 30MPa/19mm reinforced concrete cover slab to receive cover (manhole cover elsewhere measured), cover slab reinforced with 12mm diameter high tensile steel bars @ 125mm c/c in both directions, fitted on top of 150mm perimeter 30MPa/19mm concrete wall, cast on top of 150mm thick 30MPa/19mm reinforced concrete base extending 100mm wider than external face of concrete walls on all sides and base reinforced with one layer of Ref 193 Mesh with and including 15MPa cement mortar benching to falls and with 250mm x 200mm cast iron steps encapsulated in polypropylene with anti slipping blocks on stepping surface and cast into walls at 300mm centres staggered; the whole inspection chamber inclusive of all excavation, filling, compaction, formwork, etc.

- | | | | |
|---|---|----|----|
| A | Inspection chamber size 1 200mm diameter externally exceeding 1 500mm and not exceeding 2 000mm deep internally | No | 10 |
|---|---|----|----|

Covers, etc.

- | | | | |
|---|--|----|----|
| B | 560mm Diameter "Securex Type Y560C" (code 2245) or similar approved heavy duty ductile anti vandal manhole cover and frame set in position on concrete slab in 1:3 cement mortar | No | 10 |
|---|--|----|----|

Carried to Collection

N\$

Bill No. 1
Site Plumbing (Provisional)
Jordaan & Associates Quantity Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

BRICK MANHOLES

1. The following inspection chambers are to be constructed of one brick walls plastered on the inside on a 150mm thick concrete class 20MPa/19 base projecting 50mm all round with a 200mm thick reinforced concrete class 30MPa/19 precast cover slab and with a 560mm x 560mm opening. Benching is to be of class 20MPa/19 with glazed earthenware channels. Cast iron step irons are to be provided at 300mm centres

A Excavate for and build inspection chamber size 540mm x 630mm internally and not exceeding 1000mm deep to invert

No

11

Covers, etc.

B 375mm x 300mm "Type 10C" or similar approved heavy duty cast iron grid and frame cast flush in and including class 30MPa/19mm concrete

No

4

C 630mm Diameter "Type 2A" or similar approved heavy duty manhole cover and frame set in position on concrete slab in 1:3 cement mortar

No

7

Rodding eyes

D 110mm "ABC" cast iron rodding eye cast into 500mm x 500mm x 150mm thick 15MPa/19mm concrete and joint to end of uPVC pipe

No

8

Sundries

E Excavate for and break through side of existing precast concrete inspection chamber exceeding 1 000mm and not exceeding 1 500mm deep to invert and build in new 110mm uPVC sewer pipe, including altering benching as necessary including and all backfilling and compacting

No

1

F Allow for testing the whole of the Soil Drainage Installation and for replacing and/or rectifying defective work as directed by the Architect or Engineer and re-testing until found to be perfect

Item

1,500.00

Carried to Collection

N\$

Bill No. 1

Site Plumbing (Provisional)

Jordaan & Associates Quantity

Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

WATER SUPPLY

Notes:

The hot and cold water services installations are to be executed in strict accordance with the latest revision of the "Code of Practice for Copper Plumbing" issued by the S.A Copper Development Association

All surface mounted piping is to be supported at maximum 1,5m centres

**HDPE type IV Class 10 pressure pipes
with "Plasson" compression type joints**

A	25mm Pipes laid in ground including excavation and backfilling not exceeding 1m deep	m	65
B	32mm Pipe laid in ground including excavation and backfilling not exceeding 1m deep	m	22
C	50mm Pipes laid in ground including excavation and backfilling not exceeding 1m deep	m	692
D	63mm Pipes laid in ground including excavation and backfilling not exceeding 1m deep	m	360

Extra over HDPE Class 10 pressure pipes

E	25mm Fittings	No	6
F	50mm Elbow	No	8
G	63mm Elbow	No	6
H	50mm Isolating valve	No	4
J	50mm End cap	No	2
K	50mm Tee	No	15
L	63mm Tee	No	18
M	63mm Junction	No	22
N	32mm x 25mm Reducer	No	15

Carried to Collection

N\$

Bill No. 1

Site Plumbing (Provisional)

**Jordaan & Associates Quantity
Surveyors April 2025**

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	40mm x 32mm Reducer	No	16		
B	50mm x 32mm Reducer	No	11		
C	50mm x 40mm Reducer	No	8		
D	63mm x 25mm Reducer	No	6		
E	63mm x 50mm Reducer	No	6		
F	63mm x 50mm Reducing bend	No	8		
G	63mm x 50mm Reducing junction	No	8		
<u>Class 9 uPVC pressure pipes with "LYING" mechanical rubber ring joints</u>					
H	110mm Diameter pipe laid in and including trenches not exceeding 1m deep	m	230		
J	160mm Diameter pipe laid in and including trenches not exceeding 1m deep	m	62		
<u>Extra over uPVC Class 12 pipes</u>					
K	63mm x 50mm Spogot and socketed reducer	No	2		
L	110mm x 63mm Reducer	No	1		
<u>VALVES, METERS, PUMPS, ETC.</u>					
M	15mm Diameter "Cobra No. 108LK-15" or similar approved rough brass hose bibcock with lockshield, loose key and hose union	No	5		
N	Ridged Y-section standard (2,5kg/m) 1 200mm long as standpipe support cast 400mm deep into and including 20MPa unreinforced concrete base including all necessary additional excavation, casing, etc to be used for fixing of galvanised pipes (elsewhere measured)	No	5		
P	20mm Diameter x 1 200mm long galvanised steel pipe fixed to ridged Y-section	No	5		
Carried to Collection				N\$	
Bill No. 1 Site Plumbing (Provisional) Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	Grade 20MPa/19mm unreinforced concrete in thrust block size 400mm x 400mm x 400mm cast around domestic water supply pipe and fitting at change of direction, including all necessary additional excavation, formwork and backfilling	No	1	
B	"Zenner" or similar approved meter box unit with and including 63mm water meter "PSM "or similar approved connected to 63mm galvanised mild steel pipes on both sides including all fittings to execute joints	No	3	
C	Allow for testing the whole of the Water Installation and for replacing and/or rectifying defective work as directed by the Architect or Engineer and re-testing until found to be perfect		Item	
<u>WATER SUPPLIES TO FIRE APPLIANCES</u>				
Notes:				
All surface mounted piping is to be supported at maximum 1,5m centres				
Fittings to pipes with diameters not exceeding 30mm have not been separated and the Bidder is to allow for this in his prices				
<u>Class 12 uPVC pressure pipes with "LYING" mechanical rubber ring joints</u>				
D	50mm Pipes laid in ground including excavation and backfilling not exceeding 1m deep	m	30	
E	110mm Pipes laid in ground including excavation and backfilling not exceeding 1m deep	m	667	
<u>Extra over Class 12 uPVC pipes for uPVC fittings with "LYING" mechanical rubber ring joints</u>				
		No	92	
F	110mm Bend			
<u>Extra over Class 12 uPVC pipes for cast iron fittings with "LYING" mechanical rubber ring joints</u>				
		No	1	
G	110mm x 80mm Reducing junction			
Carried to Collection				N\$
Bill No. 1 Site Plumbing (Provisional) Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Heavy grade galvanised mild steel pipes</u>					
A	100mm Diameter pipe laid in ground not exceeding 1m deep, including excavation and backfilling	m	2		
<u>Extra over heavy grade galvanised mild steel pipes for the following malleable cast iron fittings</u>					
B	100mm Bend	No	5		
C	110mm Bend	No	2		
D	100mm x 80mm Reducer	No	1		
E	110mm x 100mm Reducer	No	1		
F	110mm Flanged adaptor	No	2		
G	110mm Flange equal tee	No	5		
H	100mm Flanged cast iron non return valve	No	1		
J	100mm Flanged isolating valve	No	1		
<u>Fire hydrant and booster pedestals</u>					
K	Grade 30MPa/19mm unreinforced concrete in fire hydrant pedestal size 305mm x 305mm x 1 700mm high overall	No	3		
<u>Sundries</u>					
L	Grade 20MPa/19mm unreinforced concrete in thrust block size 500mm x 500mm x 500mm cast around fire water supply pipe and fitting at change of direction, including all necessary additional excavation, formwork and backfilling	No	9		
M	Grade 20MPa/19mm unreinforced concrete square section marker block, size 200mm x 200mm wide bottom tapering to 75mm x 75mm wide at the top, 400mm deep; cast against excavated surface, with eyebolt anchored onto the base and 3mm x 1.5m long wire tied to marker block; including painting block with 3 coats of approved paint and necessary excavation, formwork, backfilling, etc.	No	3		
Carried to Collection				N\$	
Bill No. 1 Site Plumbing (Provisional) Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	630mm x 540mm Cast iron stopcock box type 10C including brick chamber below not exceeding 750mm deep internally complete	No	1
B	Prepare and apply one coat alkali resistant plaster primer, stop with "Mendall 90" or similar approved polyfiller, apply one coat universal undercoat and two coats gloss enamel (yellow) paint on concrete fire hydrant or booster pedestals	m2	4
C	Prepare and apply two coats gloss enamel (signal red) paint on brass hydrant valve	No	3
D	Allow for testing the whole of the Fire Water Installation and for replacing and/or rectifying defective work as directed by the Architect or Engineer and re-testing until found to be perfect	Item	
Carried to Collection			N\$
Bill No. 1 Site Plumbing (Provisional)			
Jordaan & Associates Quantity Surveyors April 2025			

Item No	Quantity	Rate	Amount
<p><u>SECTION NO.</u></p> <p><u>3 BILL NO. 2</u></p> <p><u>EXTERNAL WORKS (PROVISIONAL)</u></p> <p><u>NOTES:</u></p> <p>1. The Bidder is advised to refer to Trade Preamble before pricing this Bill.</p> <p>2. The nature of the ground to be excavated is believed to be sandy soil. Despite this statement, the responsibility is on the Bidder to satisfy himself as to the nature of the ground conditions to be excavated and to allow accordingly in his prices.</p> <p>3. "Hard rock" shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which requires drilling, wedging and splitting or the use of explosives.</p> <p>4. "Soft rock" shall mean hard material the removal of which warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness.</p> <p>5. The Bidder is advised that his prices for articles described by trade names or catalogue references must be based on the type and manufacture as specified and any other equivalent articles may only be used subject to written approval being obtained from the Architect.</p> <p>-----</p>			
<p style="text-align: right;">Carried to Collection</p>			<p>N\$</p>
<p>Bill No. 2 External works (Provisional) Jordaan & Associates Quantity Surveyors April 2025</p>			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

SITE CLEARANCE

Cut down and remove trees, grubs, roots, etc. and fill in holes:

A	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bushes, etc.	m2	7,935		
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THE FOLLOWING IN ROADS AND PARKINGS

Bulk earthworks

Excavations

Excavate in "earth" below natural ground level (backfilling and stockpile material) to:

B	Open face to reduce level over site	m3	1,141		
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Carting away of excavated material

C	Extra over loading and carting away surplus excavated material to a suitable dumping ground to be located by the Contractor	m3	720		
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Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:

D	Backfilling to form platform	m3	450		
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Keeping excavations free from storm water

E	Allow for keeping excavations free from water		Item		
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Compaction

Scarify top surface of existing formation to a depth of 150mm and compact to not less than 90% of the modified AASHTO maximum density

F	Under roads, paving, walkways, etc.	m2	7,781		
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Carried to Collection

N\$

Bill No. 2

External works (Provisional)

**Jordaan & Associates Quantity
Surveyors April 2025**

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

	<u>Filling ,etc.</u>				
A	Approved granular material type G5 gypcrete supplied by the Contractor and not obtained from excavations and or stockpiles on site, watered and compacted to 98% Mod AASHTO density in layers not exceeding 150mm Under road bed, etc.	m3	1,575		
B	Approved granular material type G6 supplied by the Contractor and not obtained from excavations and or stockpiles on site, watered and compacted to 95% Mod AASHTO density in layers not exceeding 150mm Under road bed, etc.	m3	980		
C	Approved beach sand material supplied by the Client watered and compacted to 100% Mod AASHTO density in layers not exceeding 150mm Under road bed, etc.	m3	933		
D	Approved top soil material formed into rockery with natural stone bouldersof 500mm diameter including intermittent shrubs in between Under road bed, etc.	m3	295		
	<u>Weedkillers, insecticides, etc.</u>				
E	Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact Under roads, paving, walkways, etc.	m2	7,781		
	Carried to Collection			N\$	
	Bill No. 2 External works (Provisional) Jordaan & Associates Quantity Surveyors April 2025				

Paving

A	60mm Thick 40MPa cement pavers in 90° herringbone pattern to falls and cambers including all cutting and filling irregularities on and including 20mm sand bed with butt joints and with a dry cement/sand mixture well rubbed into all joints, wet gently with sprinkler and all excess sand swept off
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m2

104

B	40MPa Grass block cement pavers of size 600mm x 400mm including filling with garden soil to edge of interlock pavers and grass sand
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m

529

C	40MPa Grass block cement pavers of size 600mm x 400mm including filling with garden soil to edge of interlock pavers and grass sand circular on plan
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m

415

N\$

Jordaan & Associates Quantity Surveyors April 2025

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Kerbing, channeling, etc</u>					
<u>Precast concrete kerb of 35MPa laid as described</u>					
A	Barrier kerb 125mm x 250mm high overall with one battered face and rounded edge laid on edge in position and bedded on and including 300mm wide x 225mm thick 15MPa/19mm mass concrete base and jointed and pointed in 3:1 cement mortar, including any necessary excavation, formwork, etc	m	893		
B	Barrier kerb 125mm x 250mm high overall circular on plan with one battered face and rounded edge laid on edge in position and bedded on and including 300mm wide x 225mm thick 15MPa/19mm mass concrete base and jointed and pointed in 3:1 cement mortar, including any necessary excavation, formwork, etc	m	45		
C	Mountable kerb 250mm x 125mm high overall with one battered face and rounded edge laid on edge in position and bedded on and including 300mm wide x 225mm thick 15MPa/19mm mass concrete base and jointed and pointed in 3:1 cement mortar, including any necessary excavation, formwork, etc	m	7		
D	Tapered kerb 100mm x 380mm high overall laid in well compacted sand, compaction to be at least 600mm beyond kerbing on both sides as per Engineers details including any necessary excavation, etc circular on plan	m	253		
<u>Concrete storm water channels as described</u>					
E	25MPa/19mm Concrete with 25% fly ash in channel size 100mm x 60mm deep along road kerbs	m	288		
F	25MPa/19mm Concrete with 25% fly ash in channel size 100mm x 60mm deep along road kerbs circular on plan	m	45		
Carried to Collection				N\$	
Bill No. 2 External works (Provisional) Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Concrete Test Cubes

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the architect. (Test cubes are measured separately)

A	Making and testing 150mm x 150mm x 150mm concrete strength test cube	No	24	
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Waterproofing to floors

One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting

B	Laid on surface of filling in suitable widths to receive pavers	m2	173	
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Carried to Collection

N\$

Bill No. 2
External works (Provisional)
**Jordaan & Associates Quantity
Surveyors April 2025**

[illegible]

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 3</u>			
	<u>THE FOLLOWING IN WHEEL CHAIR RAMP ACCESS</u>			
	<u>Bulk earthworks</u>			
	<u>Excavate in "earth" below natural ground level (backfilling and stockpile material) to:</u>			
A	Open face to reduce level over site	m3	12	
	<u>Excavations in trenches and holes</u>			
	<u>Excavate in "earth" not exceeding 2m deep below average natural ground level for:</u>			
B	Trenches	m3	37	
	<u>Extra over bulk excavation in "earth" for:</u>			
C	Excavating in "soft rock"	m3	5	
D	Excavating in "hard rock"	m3	2	
	<u>Carting away of excavated material</u>			
E	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	18	
	<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>			
F	Trenches and holes	m2	107	
	Carried to Collection		N\$	
	Bill No. 3 Wheel Chair Ramp Access Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Selected material obtained from excavations</u>					
<u>Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:</u>					
A	Backfilling to trenches, holes for column bases, etc.	m3	19		
<u>Approved beach sand material supplied by the Contractor watered and compacted to 100% Mod AASHTO density in layers not exceeding 150mm</u>					
B	Under road bed, etc.	m3	23		
<u>Compaction</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 90% of the modified AASHTO maximum density</u>					
C	Under roads, paving, walkways, etc.	m2	78		
D	Bottoms of trenches	m2	37		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact</u>					
E	Under roads, paving, walkways, etc.	m2	78		
F	Sides and under foundation footings and bases	m2	144		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
G	Strip footings (provisional)	m3	10		
Carried to Collection				N\$	
Bill No. 3 Wheel Chair Ramp Access Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

[illegible]

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 4</u>				
<u>THE FOLLOWING IN WELCOME ARCH</u>				
<u>Excavations in trenches and holes</u>				
<u>Excavate in "earth" not exceeding 2m deep below average formed fill layers for:</u>				
A	Column base	m3	2	
<u>Extra over bulk excavation in "earth" for:</u>				
B	Excavating in "soft rock"	m3	0.2	
C	Excavating in "hard rock"	m3	0.1	
<u>Carting away of excavated material</u>				
D	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	1	
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>				
E	Trenches and holes	m2	8	
<u>Selected material obtained from excavations</u>				
<u>Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:</u>				
F	Backfilling to trenches, holes for column bases, etc.	m3	1	
Carried to Collection				N\$
Bill No. 4 Welcome Arch Jordaan & Associates Quantity Surveyors April 2025				

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

[illegible]

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Superstructure brickwork

Brickwork in 40Mpa clay face bricks as "Namclay" or similar and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints

A	Half brick wall	m2	4.75		
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Galvanized brickwork reinforcement

B	75mm Wide reinforcement built in horizontally in foundations (Provisional)	m	18		
---	--	---	----	--	--

C	75mm Wide reinforcement built in horizontally in superstructure	m	19		
---	---	---	----	--	--

Carpentry & Joinery

D	300mm Recycled curved wooden log spanning 4 660mm overall forming arch fixed to concrete columns on both sides with stainless steel threaded rods cast in concrete 200mm deep (refer to Architect's Drawing P-405)	No	1		
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Carried to Collection

N\$

Bill No. 4

Welcome Arch

Jordaan & Associates Quantity

Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 4

Welcome Arch

COLLECTION

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No**

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Amount

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N\$

Bill No. 4

Welcome Arch

**Jordaan & Associates Quantity
Surveyors April 2025**

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 5</u>				
<u>THE FOLLOWING IN PERGOLA SHADE AND SEATING</u>				
<u>Excavations in trenches and holes</u>				
<u>Excavate in "earth" not exceeding 2m deep below average formed fill layers for:</u>				
A	Column bases	m3	0.3	
<u>Carting away of excavated material</u>				
B	Extra over all excavations for loading and carting away surplus excavated material to stock pile and levelling over site	m3	0.3	
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>				
C	Trenches and holes	m2	5	
<u>Clean, dry, coarse river sand evenly spread and compacted under solid floors to receive waterproofing membrane (solid floor & waterproofing membrane elsewhere)</u>				
D	30mm Thick layer	m3	2	
<u>Compaction</u>				
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>				
E	Bottoms of trenches	m2	1	
Carried to Collection				N\$
Bill No. 5 Pergola Shade And Seating Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

	<u>Weedkillers, insecticides, etc.</u>				
	<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>				
A	Sides and under foundation footings and bases	m2	5		
	<u>Concrete</u>				
	<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>				
B	Stub columns (provisional)	m3	0.3		
	<u>Grade 50MPa/19mm concrete with 25% fly ash with pebbles cast in:</u>				
C	Surfaced bed	m3	6		
	<u>Formwork</u>				
	<u>Rough formwork to:</u>				
D	Edge, riser, end or reveal not exceeding 300mm high or wide, circular on plan	m	12		
	<u>Waterproofing to floors</u>				
	<u>One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>				
E	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	81		
	<u>Roof & structural timber</u>				
	<u>Creosote or tar treated gumpoles & droppers fixed with approved 10/12mm diameter stainless steel bolts and nuts (nuts to be welded to bolts at ends)</u>				
F	200mm Diameter x 2 810mm long gumpole columns top fixed to rafter and bottom fixed to 3mm plates (elsewhere measured) (refer to Architect's Drawing P-406)	No	13		
Carried to Collection				N\$	
Bill No. 5 Pergola Shade And Seating Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	200mm Diameter gum pole rafters top fixed top of gumpole columns (refer to Architect's Drawing P-406)	m	37
B	100mm Diameter gum pole joists top fixed on gum pole rafters (refer to Architect's Drawing P-406)	m	40
C	35-50mm Diameter droppers from "Bentin Africa", or similar approved, sanded, varnished and laid side by side fixed to 100mm diameter gum pole joists at 120mm centres (refer to Architect's Drawing P-406)	m2	72
<u>Bolts, baseplates to columns, etc</u>			
D	3mm Thick stainless steel, U-shape fixing bracket formed of 2 x vertical plates size 100mm x 200mm each side twice holed for 10/12mm diameter stainless steel bolts and 1 x horizontal plate size 150mm x 200mm welded to and including 40mm diameter x 395mm long stainless steel rod including casting into concrete (refer to Architect's Drawing No. DT-18)	No	13
			N\$
Carried to Collection			
Bill No. 5 Pergola Shade And Seating Jordaan & Associates Quantity Surveyors April 2025			

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 5

Pergola Shade And Seating

COLLECTION

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N\$

Bill No. 5

Pergola Shade And Seating

Jordaan & Associates Quantity
Surveyors April 2025

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 6</u>				
<u>THE FOLLOWING IN SHADED SEAWALL AND SEATING</u>				
<u>Excavations in trenches and holes</u>				
<u>Excavate in "earth" not exceeding 2m deep below average natural ground level for:</u>				
A	Column bases	m3	0.5	
<u>Extra over bulk excavation in "earth" for:</u>				
B	Excavating in "soft rock"	m3	0.1	
C	Excavating in "hard rock"	m3		
<u>Carting away of excavated material</u>				
D	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	0.5	
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>				
E	Trenches and holes	m2	8	
<u>Compaction</u>				
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>				
F	Bottoms of trenches	m2	1	
Carried to Collection				N\$
Bill No. 6 Shaded Seawall And Seating Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

	<u>Weedkillers, insecticides, etc.</u>				
	<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>				
A	Sides and under foundation footings and bases	m2	9		
	<u>Concrete</u>				
	<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>				
B	Stub columns (provisional)	m3	1		
	<u>Formwork</u>				
	<u>Rough formwork to:</u>				
C	Edge, riser, end or reveal not exceeding 300mm high or wide, circular on plan	m	20		
	<u>Roof & structural timber</u>				
	<u>Creosote or tar treated gum poles & droppers fixed with approved 10/12mm diameter stainless steel bolts and nuts (nuts to be welded to bolts at ends)</u>				
D	150mm Diameter x 2 450mm long gum pole columns top fixed to rafter and bottom fixed to 3mm plates (elsewhere measured) (refer to Architect's Drawing P-505 & P-506)	No	10		
E	150mm Diameter x 2 550mm long gum pole columns top fixed to rafter and bottom fixed to 3mm plates (elsewhere measured) (refer to Architect's Drawing P-505 & P-506)	No	10		
F	100mm Diameter gum pole rafters top fixed top of gum pole columns (refer to Architect's Drawing P-505 & P-506)	m	38		
G	100mm Diameter gum pole bracing fixed to gum pole columns at 45 degree angles (refer to Architect's Drawing P-506)	m	18		
Carried to Collection				N\$	
Bill No. 6 Shaded Seawall And Seating Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	37mm Diameter droppers from "Bentin Africa", or similar approved, sanded, varnished and laid side by side fixed to 100mm diameter gum pole rafters at 125mm centres in inner most circle and 218mm centres to outer most circle (refer to Architect's Drawing P-505)	m2	67		
	<u>Timber benches</u>				
B	1 350mm x 435mm x 780mm High overall solid hardwood park bench treated with "Xylerdecor" or similar approved wood varnish by Specialist to Architect's approval and fixed to and including four concrete stub foundations, size 180mm x 180mm x 200mm deep, with and including approved chemical bolts (refer to Architect's Drawing DT-19)	No	8		
	<u>Bolts, baseplates to columns, etc</u>				
C	3mm Thick stainless steel, U-shape fixing bracket formed of 2 x vertical plates size 100mm x 200mm each side twice holed for 10/12mm diameter stainless steel bolts and 1 x horizontal plate size 150mm x 200mm welded to and including 40mm diameter x 395mm long stainless steel rod including casting into concrete (refer to Architect's Drawing No. DT-18)	No	20		

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 7</u>			
	<u>THE FOLLOWING IN GUM POLE SHADE AND SEATING</u>			
	<u>Excavations in trenches and holes</u>			
	<u>Excavate in "earth" not exceeding 2m deep below average formed fill layers for:</u>			
A	Column bases	m3	0.2	
	<u>Carting away of excavated material</u>			
B	Extra over all excavations for loading and carting away surplus excavated material to stock pile and levelling over site	m3	0.2	
	<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>			
C	Trenches and holes	m2	2	
	<u>Compaction</u>			
	<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>			
D	Bottoms of trenches	m2	0.4	
	<u>Weedkillers, insecticides, etc.</u>			
	<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>			
E	Sides and under foundation footings and bases	m2	3	
Carried to Collection				N\$
Bill No. 7 Gum Pole Shade And Seating Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

	<u>Approved weedkiller mixed in the proportion of and applied at a rate all in accordance with the manufacturer's specifications</u>				
A	Sides and under foundation footings and bases	m2	3		
	<u>Concrete</u>				
	<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>				
B	Stub columns (provisional)	m3	0.2		
	<u>Formwork</u>				
	<u>Rough formwork to:</u>				
C	Edge, riser, end or reveal not exceeding 300mm high or wide, circular on plan	m	6		
	<u>Roof & structural timber</u>				
	<u>Creosote or tar treated gum poles & droppers fixed with approved 10/12mm diameter stainless steel bolts and nuts (nuts to be welded to bolts at ends)</u>				
D	150-200mm Diameter x 1 900mm long gum pole columns top fixed to rafter and bottom fixed to 3mm plates (elsewhere measured) (refer to Architect's Drawing P-408 & P-409)	No	6		
E	75mm Diameter gum pole bracing fixed to gum pole columns and rafters at 38 degree angles (refer to Architect's Drawing P-408 & P-409)	m	8		
F	35-50mm Diameter droppers from "Bentin Africa", or similar approved, sanded, varnished and laid side by side fixed to 100mm diameter gum pole joists at 120mm centres (refer to Architect's Drawing P-408 & P-409)	m2	15		
	<u>Timber benches</u>				
G	1 350mm x 435mm x 780mm High overall solid hardwood park bench treated with "Xylerdecor" or similar approved wood varnish by Specialist to Architect's approval and fixed to and including four concrete stub foundations, size 180mm x 180mm x 200mm deep, with and including approved chemical bolts (refer to Architect's Drawing DT-19)	No	4		
Carried to Collection				N\$	
Bill No. 7 Gum Pole Shade And Seating Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Bolts, baseplates to columns, etc

A 3mm Thick stainless steel, U-shape fixing bracket formed of 2 x vertical plates size 100mm x 200mm each side twice holed for 10/12mm diameter stainless steel bolts and 1 x horizontal plate size 150mm x 200mm welded to and including 40mm diameter x 395mm long stainless steel rod including casting into concrete (refer to Architect's Drawing No. DT-18)

No

6

Carried to Collection

N\$

Bill No. 7

Gum Pole Shade And Seating

Jordaan & Associates Quantity

Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 7

Gum Pole Shade And Seating

COLLECTION

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N\$

Bill No. 7

Gum Pole Shade And Seating

Jordaan & Associates Quantity
Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 8</u>				
<u>THE FOLLOWING IN EDUCATIONAL GARDEN</u>				
<u>Excavations in trenches and holes</u>				
<u>Excavate in "earth" not exceeding 2m deep below average natural ground level for:</u>				
A	Trenches	m3	17	
<u>Extra over bulk excavation in "earth" for:</u>				
B	Excavating in "soft rock"	m3	8	
C	Excavating in "hard rock"	m3	4	
<u>Carting away of excavated material</u>				
D	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	9	
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>				
E	Trenches and holes	m2	34	
<u>Selected material obtained from excavations</u>				
<u>Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:</u>				
F	Backfilling to trenches, holes for column bases, etc.	m3	7	
Carried to Collection				NS\$
Bill No. 8 Educational Garden Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

	<u>Approved granular material type G6 supplied by the Contractor and not obtained from excavations and or stockpiles on site, watered and compacted to 95% Mod AASHTO density in layers not exceeding 150mm</u>				
A	Under walkway, etc.	m3	92		
	<u>Approved beach sand material supplied by the Contractor watered and compacted to 100% Mod AASHTO density in layers not exceeding 150mm</u>				
B	Under walkway, etc.	m3	6		
	<u>Imported material</u>				
	<u>Approved garden soil supplied by the Contractor and not obtained from excavations and or stockpiles on site, to:</u>				
C	Planters	m3	1		
	<u>Compaction</u>				
	<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>				
D	Bottoms of trenches	m2	27		
E	Ground surfaces	m2	67		
	<u>Weedkillers, insecticides, etc.</u>				
	<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>				
F	Sides and under foundation footings and bases	m2	92		
Carried to Collection				N\$	
Bill No. 8 Educational Garden Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Kerbing, channeling, etc</u>					
<u>Precast concrete kerb of 35MPa laid as described:</u>					
A	Mountable kerb 250mm x 125mm high overall with one battered face and rounded edge laid on edge in position and bedded on and including 300mm wide x 225mm thick 15MPa mass concrete base and jointed and pointed in 3:1 cement mortar, including any necessary excavation, formwork, etc	m	135		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
B	Strip footings (provisional)	m3	7		
<u>Foundation brickwork (Provisional)</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or similar and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
C	Half brick wall	m2	7		
<u>Galvanized brickwork reinforcement</u>					
D	75mm Wide reinforcement built in horizontally in foundations (Provisional)	m	82		
<u>Natural Stone</u>					
<u>Natural stone from "BC Stone" or similar approved in varying sizes bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints in:</u>					
E	200mm Thick stone wall	m2	42		
<u>Recycled granite stone from "BC Stone" or similar approved recycled waste in varying sizes bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
F	421mm x 75mm Thick seating	m	27		
G	100mm Thick x 750mm high kerbing embedded into soil 350mm deep	m	75		
Carried to Collection				N\$	
Bill No. 8 Educational Garden Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Joinery Sundries

A Solid hardwood timber instrument size 600mm x 145mm overall with 20mm x 20mm grooves cut and 40mm x 40mm grooves cut into timber to create musical notes with the instrument fixed into natural stone in concrete pocket with 2 x 10mm diameter stainless steel threaded rods built into wall at 200mm centres (refer to Architect's Drawing DT-33)

No

6

Carried to Collection

N\$

Bill No. 8
Educational Garden
Jordaan & Associates Quantity
Surveyors April 2025

[illegible]

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Paving</u>					
<u>"88 Grass Block Pavers" or similar approved permeable paving grass block pavers of 40MPa laid to falls and cambers including filling with garden soil for planting and compacting as described (refer to Architect's Drawing No. DT-06):</u>					
A	40MPa Grass block cement pavers of size 600mm x 400mm including filling with garden soil	m2	450		
<u>Kerbing, channeling, etc</u>					
<u>Precast concrete kerb of 35MPa laid as described</u>					
B	Tapered kerb 100mm x 380mm high overall laid in well compacted sand, compaction to be at least 600mm beyond kerbing on both sides as per Engineers details including any necessary excavation, etc	m	139		
<u>Waterproofing to floors</u>					
<u>One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>					
C	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	109		
<u>One layer 350 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>					
D	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	95		
<u>Natural Stone</u>					
<u>Natural stone from "BC Stone" or similar approve in varying sizes, dressed to fit into position in:</u>					
E	Steps	m3	134		
Carried to Collection				N\$	
Bill No. 9 Musical & Sunken Playground Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

	<u>Natural stone from "BC Stone" or similar approved in varying sizes:</u>				
A	Granite rocks compacted and embedded into fill layer forming mounds to receive singing rocks (elsewhere measured)	m3	57		
	<u>Recycled granite stone from "BC Stone" or similar approved recycled waste in varying sizes in:</u>				
B	200mm Thick x 750mm high retaining stone	m	31		
C	30-40mm Thick flat stone embedded in surface bed edge	m2	18		
	<u>Plastering</u>				
	<u>30mm Thick cement cambered screed finished smooth with a steel float on:</u>				
D	Concrete floors and landings	m2	203		
	<u>Paintwork</u>				
	<u>Prepare and apply three coats "Poly-T Supaflor Charcoal Polyurethane" or similar and approve polyurethane floor paint from "Coating Industries Namibia" in strict accordance to manufacturers specifications on:</u>				
E	Cement screed	m2	203		
	<u>Concrete sundries</u>				
F	Thongophone seating formed of 60mm thick x 2 000mm long x 460mm wide precast fly ash concrete slab with 2 x 60mm thick x 460mm square fly ash reinforced concrete bases with 8 x 450mm long stainless steel threaded rods cast into concrete footing and slab with 80mm internal diameter bambo with varying lengths passing through threaded rods (refer to Architect's Drawing No. DT-14):	No	2		
Carried to Collection				N\$	
Bill No. 9 Musical & Sunken Playground Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	Thongophone size 1 110mm x 2 790mm overall at 108.5 degree angle with perpendicular concrete footings size 330mm x 430mm x 1110mm long and diagonal concrete footing 330mm x 430mm x 2 307mm long with 8 x 69mm diameter fibre cement pipes in various lengths from 1 320mm to 2 623mm, embedded into concrete footings with 45 degree pipe bends (refer to Architect's Drawing No. DT-13):	No	1		
B	Stone xylophone size 1 100mm x 530mm x 920mm high overall with 1 100mm x 330mm x 800mm high reinforced concrete wall cast 300mm deep with granite stones in varying thicknesses fixed to concrete wall top with stainless steel threaded rods and nuts (refer to Architect's Drawing DT-12)	No	1		
		Carried to Collection		N\$	
Bill No. 9 Musical & Sunken Playground Jordaan & Associates Quantity Surveyors April 2025					

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 10</u>				
<u>THE FOLLOWING IN KIDS PLAYGROUND</u>				
<u>Earthworks</u>				
<u>Imported material</u>				
<u>Approved garden soil supplied by the Contractor and not obtained from excavations and or stockpiles on site, to:</u>				
A	Ground cover	m3	40	
<u>Paving</u>				
<u>"88 Grass Block Pavers" or similar approved permeable pavin grassblock pavers of 40MPa laid to falls and cambers including filling with garden soil for planting and compacting as described (refer to Architect's Drawing No. DT-06):</u>				
B	40MPa Grass block cement paver of size 600mm x 400mm x 100mm thick including filling with garden soil	m2	200	
<u>Kerbing, channeling, etc</u>				
<u>Precast concrete kerb of 35MPa laid as described:</u>				
C	Tapered kerb 100mm x 380mm high overall laid in well compacted sand, compaction to be at least 600mm beyond kerbing on both sides as per Engineers details including any necessary excavation, etc	m	129	
<u>Natural Stone</u>				
<u>Natural stone from "BC Stone" or similar approved in varying sizes:</u>				
D	Stones compacted and embedded into sand fill	m3	11	
Carried to Collection			N\$	
Bill No. 10 Kids Playground Jordaan & Associates Quantity Surveyors April 2025				

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

<u>Recycled granite stone from "BC Stone" or similar approved recycled waste in varying sizes embedded in sand</u>	m	114	N\$
A 200mm Thick x 980mm high retaining stone			
Carried to Collection			
Bill No. 10 Kids Playground Jordaan & Associates Quantity Surveyors April 2025			

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 10

Kids Playground

COLLECTION

Total Brought Forward

Total Brought Forward

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No

106

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Amount

Carried Forward to Summary of Section No. 3
Bill No. 10
Kids Playground
Jordaan & Associates Quantity
Surveyors April 2025

N\$

Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 11</u>			
<u>THE FOLLOWING IN TWO VOLLEYBALL FIELDS</u>			
<u>Bulk excavations</u>			
<u>Excavate in "earth" below natural ground level</u> <u>(backfilling and carting away surplus material elsewhere)</u> <u>to:</u>			
A	Open face to reduce level under floors	m3	48
<u>Extra over bulk excavation in "earth" for:</u>			
B	Excavating in "soft rock"	m3	5
C	Excavating in "hard rock"	m3	2
<u>Excavations in trenches and holes</u>			
<u>Excavate in "earth" below natural ground level</u> <u>(backfilling and carting away surplus material elsewhere)</u> <u>for:</u>			
D	Holes for column bases, etc.	m3	0.1
<u>Carting away of excavated material</u>			
E	Extra over all excavations for loading and carting away surplus excavated material to a suitable dumping ground to be located by the Contractor	m3	0.1
<u>Keeping excavations free from water</u>			
F	Allow for keeping excavations free from water	Item	
Carried to Collection			N\$
Bill No. 11 Two Volleyball Fields Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Filling</u>					
<u>Approved beach sand material supplied by the Contractor watered and compacted to 100% Mod AASHTO density in layers not exceeding 150mm</u>					
A	Sand filling under field	m3	98		
<u>Compaction of surfaces</u>					
B	Scarify top surface of excavated area to a depth of 150mm and compact to not less than 95% of the modified AASHTO maximum density, to receive filling	m2	327		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact</u>					
C	Under volley ball, paving, walkways, etc	m2	327		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
D	Post column base	m3	0.1		
<u>Volley ball post & net (refer to Architect's Drawing B-305)</u>					
<u>The following in gum pole volleyball posts, with gum pole posts, only, supplied by the Employer, cast into concrete with 4 x 12mm stainless steel hoop eye bolts with nuts welded on the end, including all holes, bolting, hoisting and fixing in position complete:</u>					
E	Purpose made volleyball post formed of 100-125mm diameter gum pole, 3 000mm long with an approved net tightener welded on (refer to Architect's Drawing P-305)	No	4		
Carried to Collection				N\$	
Bill No. 11 Two Volleyball Fields Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	<p>The following in volley ball net</p> <p>9 000mm x 1 000mm High volleyball net made or 4mm thick nylon or similar and approved mesh with two 50mm wide headbands of canvas sewn along the perimeters</p> <p>No</p> <p>2</p> <p>Carried to Collection</p> <p>Bill No. 11 Two Volleyball Fields Jordaan & Associates Quantity Surveyors April 2025</p>			<p>N\$</p>
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CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 11

Two Volleyball Fields

COLLECTION

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No**

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Total Brought Forward

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Amount

Carried Forward to Summary of Section No. 3

N\$

Bill No. 11

Two Volleyball Fields

**Jordaan & Associates Quantity
Surveyors April 2025**

Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 12</u>			
<u>THE FOLLOWING IN FISH CLEANING AREAS</u>			
<u>Excavations in trenches and holes</u>			
<u>Excavate in "earth" not exceeding 2m deep below average formed fill layers for:</u>			
A	Trenches	m3	2
<u>Extra over bulk excavation in "earth" for:</u>			
B	Excavating in "soft rock"	m3	0.2
C	Excavating in "hard rock"	m3	0.1
<u>Carting away of excavated material</u>			
D	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	1
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>			
E	Trenches and holes	m2	7
<u>Filling, etc</u>			
<u>Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:</u>			
F	Backfilling to trenches, holes for column bases, etc.	m3	1
Carried to Collection			N\$
Bill No. 12 Fish Cleaning Areas Jordaan & Associates Quantity Surveyors April 2025			

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Compaction</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>					
A	Bottoms of trenches	m2	3		
B	Ground surfaces	m2	2		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>					
C	Sides and under foundation footings and bases	m2	9		
D	Under solid floors	m2	2		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in</u>					
E	Strip footings (provisional)	m3	1		
<u>Grade 50MPa/19mm concrete with 25% fly ash in:</u>					
F	Surface beds	m3	0.2		
G	Slab	m3	1		
<u>Rough formwork (Degree of accuracy III)</u>					
<u>Rough formwork to soffit of:</u>					
H	Slab	m2	10		
<u>Rough formwork to sides of:</u>					
J	Edge, riser, end or reveal not exceeding 300mm high or wide	m	7		
Carried to Collection				N\$	
Bill No. 12 Fish Cleaning Areas Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Foundation brickwork (Provisional)</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
A	Half brick wall	m2	2		
<u>Superstructure brickwork</u>					
<u>Brickwork (7 MPa nominal compressive strength) in class II mortar</u>					
B	Half brick wall	m2	5		
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
C	Half brick wall	m2	7		
<u>Galvanized brickwork reinforcement</u>					
D	75mm Wide reinforcement built in horizontally in foundations (Provisional)	m	15		
<u>Waterproofing to floors</u>					
<u>One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>					
E	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	4		
<u>Plastering</u>					
<u>12mm Thick external cement plaster (Class I) finished smooth with a wood float to brickwork on:</u>					
F	Walls	m2	9		
G	Narrow widths	m2	1		
Carried to Collection				N\$	
Bill No. 12 Fish Cleaning Areas Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Drainage</u>					
<u>uPVC pipes and fittings</u>					
A	32mm Pipe	m	0.4		
B	40mm Pipe	m	5		
<u>Extra over uPVC pipes for the following fittings</u>					
C	32mm x 40mm BSP adaptor	No	1		
D	32mm Bend	No	5		
E	32mm Tee	No	3		
<u>Water Supply</u>					
<u>HDPE type IV Class 10 pressure pipes with "Plasson" compression type joints</u>					
F	25mm Pipes	m	5		
G	32mm Pipe laid in ground including excavation and backfilling not exceeding 1m deep	m	2		
<u>Extra over HDPE Class 10 pressure pipes</u>					
H	32mm x 25mm Reducer	No	1		
<u>Taps, valves, etc</u>					
J	15mm Diameter "Cobra No. 108LK-15" or similar approved rough brass hose bibcock with lockshield, loose key and hose union	No	4		
<u>Paintwork</u>					
<u>Prepare and apply one coat "Promac Plaster Primer" or similar approved and two coats "Promac ProMatt" or similar approved PVA paint on:</u>					
K	External walls, columns and beams	m2	9		
Carried to Collection				N\$	
Bill No. 12 Fish Cleaning Areas Jordaan & Associates Quantity Surveyors April 2025					

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 12

Fish Cleaning Areas

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Total Brought Forward

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N\$

Bill No. 12

Fish Cleaning Areas

Jordaan & Associates Quantity

Surveyors April 2025

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**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Compaction</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>					
A	Bottoms of trenches	m2	14		
B	Ground surfaces	m2	16		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>					
C	Sides and under foundation footings and bases	m2	14		
D	Under solid floors	m2	16		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
E	Strip footings (provisional)	m3	3		
<u>Grade 50MPa/19mm concrete with 25% fly ash in:</u>					
F	Surface beds	m3	2		
<u>Water supply</u>					
<u>Class 0 copper pipes</u>					
G	15mm Pipes cast in concrete	m	2		
<u>Extra over Class 0 copper pipes for capillary fittings</u>					
H	15mm Fittings	No	6		
<u>Sundries</u>					
J	300mm Diameter fibre cement shower column with concrete infill	No	4		
Carried to Collection				N\$	
Bill No. 13 Beach Showers Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Surface treatment</u>					
<u>Finishing top surfaces of concrete smooth</u>					
A	With a steel float	m2	16		
<u>Foundation brickwork (Provisional)</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
B	One brick wall	m2	18		
<u>Superstructure brickwork</u>					
<u>Natural stone from "BC Stone" or similar approved in varying sizes bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints and sealed with perafix- water mixture brushed over surface in:</u>					
C	One brick wall	m2	17		
<u>Galvanized brickwork reinforcement</u>					
D	150mm Wide reinforcement built in horizontally in foundations (Provisional)	m	266		
E	150mm Wide reinforcement built in horizontally in superstructure	m	65		
<u>Waterproofing to floors</u>					
<u>One layer 250 micron "Gunplas Black" or similar approved damp proof membrane including maintaining in position during concreting</u>					
F	Laid on surface of filling in suitable widths to receive concrete surface bed	m2	16		
Carried to Collection				N\$	
Bill No. 13 Beach Showers Jordaan & Associates Quantity Surveyors April 2025					

Brass

A	Vandal proof overhead shower rose (code RADA VR 105-310R) without a shower arm including vandal proof concealed metering valve (code 155S)
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No

14

Carried to Collection

NS

Jordaan & Associates Quantity Surveyors April 2025

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 14</u>				
<u>THE FOLLOWING LIFTING STATION BOUNDARY WALL</u>				
<u>Excavations in trenches and holes</u>				
<u>Excavate in "earth" not exceeding 2m deep below average formed fill layers for:</u>				
A	Trenches	m3	11	
<u>Extra over bulk excavation in "earth" for:</u>				
B	Excavating in "soft rock"	m3	1.1	
C	Excavating in "hard rock"	m3	0.5	
<u>Carting away of excavated material</u>				
D	Extra over all excavations for loading and carting away surplus excavated material to suitable dumping ground to be located by the Contractor	m3	8	
<u>Risk of collapse to side of excavation in "earth" not exceeding 1.5m deep starting from average natural, reduced or consolidated filled ground level for:</u>				
E	Trenches and holes	m2	42	
<u>Filling, etc</u>				
<u>Spread, level, water and compact selected material obtained from excavations to not less than 98% of the modified AASHTO maximum density in layers not exceeding 150mm and trim to level in:</u>				
F	Backfilling to trenches, holes for column bases, etc.	m3	2	
Carried to Collection				N\$
Bill No. 14 Lifting Station Boundary Wall Jordaan & Associates Quantity Surveyors April 2025				

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Compaction</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>					
A	Bottoms of trenches	m2	14		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>					
B	Sides and under foundation footings and bases	m2	57		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
C	Strip footings (provisional)	m3	4		
<u>Foundation brickwork (Provisional)</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
D	Half brick wall	m2	14		
<u>Superstructure brickwork</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
E	Half brick wall	m2	51		
<u>Galvanized brickwork reinforcement</u>					
F	75mm Wide reinforcement built in horizontally in foundations (Provisional)	m	166		
Carried to Collection				N\$	
Bill No. 14 Lifting Station Boundary Wall Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

A	75mm Wide reinforcement built in horizontally in superstructure	m	200		
	<u>Joinery fittings</u>				
B	1 350mm x 435mm x 780mm High overall solid hardwood park bench treated with "Xylerdecor" or similar approved wood varnish by Specialist to Architect's approval and fixed to and including four concrete stub foundations, size 180mm x 180mm x 200mm deep, with and including approved chemical bolts (refer to Architect's Drawing DT-19)	No	3		

Carried to Collection

N\$

Bill No. 14
Lifting Station Boundary Wall
Jordaan & Associates Quantity
Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 14

Lifting Station Boundary Wall

COLLECTION

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Total Brought Forward

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No**

123

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125

Amount

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N\$

Bill No. 14

Lifting Station Boundary Wall

**Jordaan & Associates Quantity
Surveyors April 2025**

[illegible]

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Imported material</u>					
<u>Approved garden soil supplied by the Contractor and not obtained from excavations and or stockpiles on site, to:</u>					
A	Planters	m3	5		
<u>Compaction</u>					
<u>Scarify top surface of existing formation to a depth of 150mm and compact to not less than 93% of the modified AASHTO maximum density</u>					
B	Bottoms of trenches	m2	8		
<u>Weedkillers, insecticides, etc.</u>					
<u>Loosen top surface or filling for a depth of 50mm, including forming V-grooves, level and dose uniformly with "Bayer Premise SC" or similar approved soil insecticide solution, including raking over to ensure an even distribution and recompact:</u>					
C	Sides and under foundation footings and bases	m2	4		
<u>Concrete</u>					
<u>Grade 40MPa/19mm concrete with 25% fly ash in:</u>					
D	Strip footings (provisional)	m3	2		
<u>Foundation brickwork (Provisional)</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or similar and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
E	Half brick wall, circular on plan	m2	2		
F	385mm Brick wall circular on plan	m2	6		
Carried to Collection				N\$	
Bill No. 15 Planters Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Superstructure brickwork</u>					
<u>Brickwork in 40Mpa clay face bricks as "Namclay" or other equal and approved in stretcher bond bedded, jointed and pointed in cement mortar with recessed horizontal and vertical joints</u>					
A	Half brick wall	m2	10		
<u>Galvanized brickwork reinforcement</u>					
B	75mm Wide reinforcement built in horizontally in superstructure	m	123		
C	150mm Wide reinforcement built in horizontally in foundations (Provisional)	m	65		
<u>Natural Stone</u>					
<u>Granite slab as by "BC Stone" or similar approved mining waste bedded in cement mortar</u>					
D	475mm x 40mm Thick flat stone coping	m	4		
<u>Waterproofing</u>					
<u>"ABE Index Defend" or similar approved waterproofing membrane, with added phenoxl fatty acid ester to the polymer bitumen mix applied in strict accordance to the manufacturer's specifications</u>					
E	Planter walls	m2	10		
<u>Apply three coats "ABE Duraflex" or similar approved waterproofing slurry in accordance to manufacturer's specifications</u>					
F	Surfaces of planter walls	m2	26		
<u>"Kaytech" or similar approved</u>					
G	"Bidim A2" non woven geofabric wrapped around crushed stone (elsewhere measured)	m2	20		
<u>19-25mm clean crushed stone laid on top of water proofing (water proofing elsewhere measured) on:</u>					
H	Planters	m3	2		
Carried to Collection				N\$	
Bill No. 15 Planters Jordaan & Associates Quantity Surveyors April 2025					

[illegible]

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Concrete table and benches</u>					
A	1 200mm Diameter precast concrete table 75mm thick fixed on BC Stone Mining waste pedestal with 6No.recycled concrete seats including excavation, cartaway, concrete footing (refer to Architect's Drawing no. DT-15.1)	No	16		
<u>"WIBEKU" or similar approved precast concrete bin</u>					
B	38mm Thick x 475mm diameter x 900mm high precast concrete bin, encased in 110mm thick 40MPa "Namclay" rockface brickwork 765mm high on and including 40MPa/19mm with 25% fly ash concrete base size 815mm x 815mm x 150mm thick with 1:8 sand/cement mortar filling around and to the bottom of bin (refer to Architect's Drawing DT-11)	No	23		
<u>"WIBEKU" or similar approved precast concrete tree rings</u>					
C	50mm x 250mm x 1000mm Diameter tree ring	No	24		
<u>Supply and plant lawn, including excavation, backfilling with garden soil mixed with compost and manure, supaphosphate and polymer crystals, compacting and maintaining in good condition for a period of three months after practical completion of project:</u>					
D	"Kavango" or similar approved lawn grass (refer to Architect's Drawing T-19, DT-37)	m2	1,523		
<u>Bollards, etc.</u>					
E	300mm x 100mm x 1 500mm High rectangular recycled wooden bollard with 500mm cast in 400mm x 400mm x 600mm deep concrete base including all excavations, backfilling, cartaway, etc (refer to Architect's Drawing DT-03)	No	5		
Carried to Collection				N\$	
Bill No. 16 Landscaping Jordaan & Associates Quantity Surveyors April 2025					

Bicycle rack

Bill No. 16
Landscaping
Jordaan & Associates Quantity
Surveyors April 2025

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION

Section No. 3

Bill No. 16

Landscaping

COLLECTION

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Amount

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N\$

Bill No. 16

Landscaping

**Jordaan & Associates Quantity
Surveyors April 2025**

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

Bill No	<u>SECTION SUMMARY - Site Works</u>	Page No	Amount
1	Site Plumbing (Provisional)	68	
2	External works (Provisional)	75	
3	Wheel Chair Ramp Access	79	
4	Welcome Arch	83	
5	Pergola Shade And Seating	87	
6	Shaded Seawall And Seating	91	
7	Gum Pole Shade And Seating	95	
8	Educational Garden	100	
9	Musical & Sunken Playground	105	
10	Kids Playground	108	
11	Two Volleyball Fields	112	
12	Fish Cleaning Areas	117	
13	Beach Showers	122	
14	Lifting Station Boundary Wall	126	
15	Planters	131	
16	Landscaping	135	
Carried to Final Summary			N\$
Jordaan & Associates Quantity Surveyors April 2025			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 1</u>			
<u>SPECIALIST INSTALLATIONS AND BUDGETARY ALLOWANCES</u>			
<u>INSTALLATIONS BY SPECIALIST INSTALLERS</u>			
<p>1. The following Provisional Sums are for Specialist Installations, whose actual cost will be ascertained once the relevant Bills from the Mechanical and Electrical Engineers have been priced.</p> <p>2. These sums include all allowances for Contingency, Preliminaries, etc.</p> <p>3. An item has been included to allow the Bidder to price for attending upon the Specialist Installers and these items will only be adjusted in the Final Account if the extent of such installations either increases or decreases. Attendance upon Specialist Installers executing the work shall include providing use of and erecting scaffolding, adequate storage space and generally executing all necessary jobbing works required and making good in all trades.</p>			
<u>Electrical Installation:</u>			
A	Item		1,060,400.00
Provide the Provisional Sum of N\$1,060,400.00 (One Million and Sixty Thousand Four Hundred Namibian Dollars) for Electrical Installation, executed complete			
B		%	
Attendance			
<u>Security, Alarm, Surveillance and Access Control Installation:</u>			
C	Item		322,000.00
Provide the Provisional Sum of N\$322,000.00 (Three Hundred and Twenty Two Thousand Namibian Dollars) for Security, Alarm, Surveillance and Access Control Installation, executed complete			
Carried to Collection			N\$
Bill No. 1 Prime Cost, Provisional sums, etc. Jordaan & Associates Quantity Surveyors April 2025			

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

A	Attendance		%		
B	Provide the Provisional Sum of N\$53,600.00 (Fifty Three Thousand Six Hundred Namibia Dollars) for Computer Network Installation, executed complete	Item		53,600.00	
C	Attendance		%		
D	Provide the Provisional Sum of N\$300,000.00 (Three Hundred Thousand Namibia Dollars) for Sewer Pump Station Installation, executed complete	Item		300,000.00	
E	Attendance		%		
F	Allow the Provisional Sum of N\$100,000.00 (One Hundred Thousand Namibian Dollars) for material tests to be executed as instructed by the Engineer	Item		100,000.00	
G	Allow the Provisional Sum of N\$10,000.00 (Ten Thousand Namibian Dollars) for Municipal Connections complete by local authorities	Item		10,000.00	
H	Allow the Provisional Sum of N\$25,000.00 (Twenty Five Thousand Namibian Dollars) for Fire Hydrant and Booster System Installation, executed complete	Item		25,000.00	
Carried to Collection				N\$	
Bill No. 1 Prime Cost, Provisional sums, etc. Jordaan & Associates Quantity Surveyors April 2025					

**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE
AT WALVIS BAY IN THE ERONGO REGION**

<u>Outdoor Gym Equipment Installation</u>				
A	Allow the Provisional Sum of N\$270,000.00 (Two Hundred and Seventy Thousand Namibian Dollars) for Outdoor Gym Equipment Installation by Fitness Network, executed complete	Item	270,000.00	
<u>Kids Playground Equipment Installation</u>				
B	Allow the Provisional Sum of N\$80,000.00 (Eighty Thousand Namibian Dollars) for Kids Playground Equipment Installation supply by the Municipality of Walvis Bay, executed complete	Item	80,000.00	
<u>Stage Timber Structure</u>				
C	Allow the Provisional Sum of N\$80,000.00 (Eighty Thousand Namibian Dollars) for Timber Structure Construction at the Musical Playground Stage, executed complete	Item	80,000.00	
<u>Landscaping</u>				
D	Allow the Provisional Sum of N\$100,000.00 (One Hundred Thousand Namibian Dollars) for Landscaping, executed complete	Item	100,000.00	
<u>Singing Rocks</u>				
E	Allow the Provisional Sum of N\$20,000.00 (Twenty Thousand Namibian Dollars) for the supply of Singing Rocks	Item	20,000.00	
<u>Detail Design Development</u>				
F	Allow an amount of N\$60,000.00 (Sixty Thousand Namibian Dollars) Only for Detail Design Development Contingency, executed complete	Item	60,000.00	
<u>Signage</u>				
G	Provide the Provisional Sum of N\$100,000.00 (One Hundred Thousand Namibian Dollars) for Signage Installation, executed complete	Item	100,000.00	
Carried to Collection			N\$	
Bill No. 1 Prime Cost, Provisional sums, etc. Jordaan & Associates Quantity Surveyors April 2025				

CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION

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**CONSTRUCTION OF THE WALVIS BAY INDEPENDENCE
BEACH PROMENADE AT WALVIS BAY IN THE ERONGO REGION**

<u>ARCHITECTURAL DRAWINGS REFERED TO IN BOQ</u>		
	<u>Drawing No.</u>	<u>Description</u>
	P-305 P-405 P-406 P-408 P-407 P-409 P-505 P-506	Volleyball Field Welcome Arch Layout Plan Pergola Layout Gum Pole Shade and Seating Bicycle Parking Gum Pole Shade and Seating Seawall Seating Seawall Seating – Section & Elevation
	DT-03 DT-05 DT-06 DT-08 DT-10 DT-11 DT-12 DT-13 DT-14 DT-15.1 DT-18 DT-19 DT-23 DT-27 DT-33 DT-65	Typical Bollard Accessibility Ramp Park Walkway Turf Paver Sidewalk Seawall Coping Concrete Waste Bin Stone Xylophone Thong Phone Thong Phone Seating Pergola Seating Gum Pole Fixing Park Bench Door Timber Latch Detail Fog Collection Point Wooden Groove instrument Ablution Entrance Door
	WS-01	Window Schedule
	WS-02	Window Schedule
	DS-01	Door Schedule
	DS-04	Door Schedule
	DT-37 – T14	Promenade Plants