

**PROJECT DESCRIPTION: IZIKO MUSEUMS EXISTING GUARD HOUSE AT  
THE NELSON MANDELA PRISON HOME ELECTRICAL REPAIRS PROJECT**

**IZIKO MUSEUMS OF SOUTH AFRICA – SOUTH AFRICAN MUSEUM**

**SCOPE OF WORK, SPECIFICATIONS AND DRAWINGS**

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## **GENERAL NOTES TO TENDERERS**

### **INTRODUCTION**

The Client, Iziko Museums of South Africa, hereon referred to as the Employer, requires the repair of the Guard House in the existing dwelling in Paarl for the South African Museums. This work will include replacing existing light fittings (re-using existing outlet points), replacing some socket outlets as well as some light switches. The installation is to be tested and declared safe.

### **TERMS AND DEFINITIONS**

In interpreting this specification, the following words shall have the meaning herein assigned to them unless there is something in the subject matter or context inconsistent with such construction.

**“Shall”** is mandatory.

**“Should”** is strongly recommended.

**“TIP”** or **“Tie-In Point”** is a connection to an existing system that should not require a plant shutdown or significant isolation to make the connection.

## GENERAL INFORMATION

The building is an existing dwelling and the electrical inside and outside will be repaired to a safe condition.

## SCOPE OF WORK AND SUMMARY OF THE REQUIREMENTS OF THE CONTRACT

### GENERAL

The Contract consists of supplying new lights fittings and replacing damaged light switches and socket outlets. Then new light fittings, light switches and plugs are to be installed/replaced as per detailed on the drawings and in the Bills of Quantities. Testing, commissioning, maintenance, and guarantee for the specified period are part of the work.

### Existing System:

#### a) Light Fittings:

- There are existing light points and to be re-used. The new be replaced with new LED types with flicker free drivers. For more information, please see Addendum A: Lighting Schedule.

#### b) Light Switches:

- All the old light switches must be replaced with new ones. The switches must be 16A single lever equal or similar to type Onesto.

#### c) Existing Electrical DB:

- The existing electrical distribution board to be checked and repaired to comply with the relevant SANS 10142 Standards.

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## SCOPE INCLUSIONS

Included in the above Scope of Work are the following:

- a) Supply of "as built" drawings.
- b) Supply of all necessary certifications.
- c) Packing and shipping of all equipment to site.
- d) Submission of procurement, manufacturing, and delivery

program.

- e) All inspection and testing as required including all necessary testing equipment such as bolts, gaskets, hoses, flanges, plugs, test pumps and gauges etc.
- f) Painting of equipment in accordance with the Specifications.
- g) All safety equipment (guards and locking facilities etc. as applicable).
- h) Supply of 3<sup>rd</sup> party inspection and non-destructive testing as required; and

## SCOPE EXCLUSIONS

Excluded from this scope of work are the following:

- a) Civil work.
- b) Mechanical work.
- c) Demolishing and Building work.

## VISIT TO SITE

Tenderers must acquaint themselves with local site conditions such as access to the building, area available on site, type of ground, space available for on-site fabrication, storage, transport, loading and unloading facilities, scaffolding, tackles, and tools needed, as no claims by the Contractor, which may arise from ignorance of the site conditions, will be considered.

## MATERIAL AND WORKMANSHIP

The Contract works shall be executed in accordance with the specified standards and level of workmanship, to the satisfaction of the Engineer.

All materials shall be of the quality specified and the Contractor shall, upon request of the Engineer, furnish him with proof to his satisfaction that the materials are of the specified quality.

All materials and equipment used for the Installations shall be new and undamaged.

The Contractor shall, if requested by the Engineer, provide samples of material and equipment for approval. If judged necessary by the

Engineer, such samples, may only be returned after the completion of the Installation, to ensure that the quality of the installed product is the same as that of the approved sample.

## REFERENCE SPECIFICATIONS AND STANDARDS

The latest revision of any Specification referred to in this Specification will be applicable.

Where a Specification or standard is not specifically referred to, it will be assumed that the relevant SANS, ISO, BS, DIN or equivalent American standard, listed in order of preference will apply.

### Applicable Standards

- a) The Occupational Health and Safety Act of 1993 (OHS Act).
- b) SANS 10142-1 Code of Practice for the wiring of premises Part 1
- c) SANS-60669-2-1 Light switches standards
- d) Relevant by-laws of local or other authorities.

The following will generally apply where particularly pertinent:

Standard	Abbreviation
American National Standards Institute	ANSI
American Petroleum Institute	API
American Society of Mechanical Engineers	ASME
British Standards	BS
European Standards	EN
German Institute for Standardization	DIN
International Standards Organisation	ISO
International Electrotechnical Commission	IEC
Eurocodes	EC
International Organization for Standardization	ISO
South African National Standards	SANS

Note: National and International Standards must be adhered to as a minimum requirement. The Supplier may propose equivalent acceptable standards however these must be specified.

## VARIATION TO STANDARDISED SPECIFICATIONS

Should any requirements of the project specifications conflict with any requirements of the standardized specification, the requirements of the standardized specifications shall prevail.

## SCHEDULE OF RATES

Rates indicated in the Schedule of Quantities shall, where applicable, include material, cutting and waste, patterns, models and templates, labour, supervision, duty and taxes, marking, transport, delivery, unloading, storing, unpacking, hoisting, labour, setting and fixing in position, temporary works, return of packings, tools, provision of Contractor's equipment and consumables necessary for the complete installation.

## DRAWINGS

The following drawings form part of this tender:

**202401-15/E100 Rev.1 NMPH Electrical Layout E100 Rev.1**

## Health And Safety

The Contractor shall comply with the Health and Safety Regulations as issued by Iziko Museums.

## OPERATING AND MAINTENANCE MANUAL

The Contractor shall, at his cost, prepare and supply manuals for the successful operation and maintenance of the Installation.

Two weeks prior to the commencement of commissioning, the Contractor shall supply a draft of the manual to the Engineer for approval.

Two weeks after commissioning, the Contractor shall supply four (4) additional manuals that have been updated and include all commissioning data, CoC's, and "as built" drawings.

The Contractor shall supply an electronic copy of all O & Manuals, as built drawings, commissioning data, and CoC's.

## INSPECTIONS AND TESTING

### Inspections (Part III, SAACE - 1978)

The Engineer shall have general supervision and direction of the Contract Works. Supervision shall comprise such periodic visits as

the Engineer may consider it necessary to inspect the Contract Works for conformity with the Contract documentation and to provide clarification and further information as necessary.

The Engineer shall have the power at any time to inspect and examine any part of the Contract Works or any materials intended for use in or on the Contract Works, either on the site or at any factory, workshop or other place where such parts or materials are being constructed or manufactured or at any place where same are lying or from where they are being obtained, and the Contractor shall give all such facilities as the Engineer may reasonably require to be given for such inspection and examination.

The Contractor shall not be liable for the cost of inspecting materials at the place of manufacture, construction or storage nor be responsible for any travelling or accommodation costs arising out of the execution of such inspection etc.

## COMMISSIONING AND HANDING OVER

### Procedure

#### Physical Completion

After physical completion of the erection phase of the Installations, the Engineer will issue a Snags List certifying that commissioning can proceed. Items which would not influence the commissioning process could, at the discretion of the Engineer, be attended to during the commissioning stage.

#### Commissioning Stage

After commissioning the Engineer will issue a second Snags List (the Commissioning Snags List). Any outstanding work will be recorded on this List.

#### Engineer's Certificate

After completion of all outstanding items and receipt of all manuals and drawings as recorded on the Commissioning Snags List, the Engineer will issue an Engineer's Certificate. This certificate will accompany a certificate of acceptance by the Client's representative. The one-year maintenance and guarantee period will commence on the date of the Engineer's Certificate.

## MAINTENANCE DURING THE GUARANTEE PERIOD

During the guarantee period the Contractor shall be fully responsible for complete maintenance of the Installation. The guarantee period on material, equipment and labour performed commences on the date when the Engineer's Certificate and the Clients Certificate of Acceptance are issued and expires one calendar year later.

## ALTERNATIVE EQUIPMENT

The words "similar or equal to", are implied wherever specific descriptions of equipment are provided.

In the case of specific product names being provided in schedules, implies that such equipment was selected for design purposes only.

Tenderers may offer alternative equipment with the understanding that such alternative offers are "similar and equal to" the selected equipment (in quality and performance) on which the design was based.

The Engineer shall reserve the right, on behalf of the client, to decide whether such equipment is acceptable or not. Subject to a tender being accepted with such alternatives, approval must be obtained from the Engineer for such alternatives prior to the Contractor placing orders for the equipment.

## REQUEST BY ENGINEER FOR CHANGES

When a variation becomes necessary, the Engineer shall notify the Contractor in writing, setting out the scope and nature of the proposed variation.

The Contractor shall then determine what cost variation, if any, is involved, giving due consideration to any material already prepared or work already done which would require alterations.

Variation in cost shall be in accordance with rates set out in the Contract where these are applicable. A price breakdown is to accompany the variation quotation submitted.

Within seven (7) days of receipt of the Engineer's request for variation, the Contractor shall inform him of the price adjustment attributable to

the proposed variation. If it is decided that the work shall proceed, the Engineer will then issue a Variation Order to the Contractor, authorizing him to carry out the variation.

If the Contractor should fail to notify the Engineer within seven (7) days that there will be a cost increment associated with the proposed variation, it will be assumed in default that no cost variation is applicable.




If the carrying out of any variation instructed by the Engineer would, in the opinion of the Contractor, prevent him from fulfilling any of his obligations under the Contract, including the timely completion of the Contract, he shall notify the Engineer in writing without delay, and shall submit computations or other evidence in support of his opinion.

The Engineer should then decide whether or not the variation is carried out. If the Engineer confirms his instructions to carry out the variation, the Contractor shall be held relieved of his obligation under the Contract insofar as they are affected by the required variation. The Engineer's decision as to the validity of the Contractors' claim is however final.



## ADDENDUM A

### SCHEDULE OF LIGHT FITTINGS

Item	Type	Description	Picture
1	C	Surface mounted LED linear light fitting equal or similar to type Lights By Linea TRIPROOF 30W White complete with flicker free controller.	
2	B1	Surface mounted round bulkhead type equal or similar to type Lascon B10 Dome White 10W LED complete with flicker free controller.	 DOME
3	B2	Surface mounted round bulkhead type equal or similar to type Lascon B10 Flat White 10W LED complete with flicker free controller.	 FLAT