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**PROJECT DESCRIPTION: IZIKO MUSEUMS – MUSEUM NEW STEEL STAIR**  
**IZIKO MUSEUMS OF SOUTH AFRICA – SOUTH AFRICAN MUSEUM**  
**TENDER SCOPE OF ELECTRICAL WORK &**  
**SPECIFICATIONS**

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## GENERAL NOTES TO TENDERERS

### INTRODUCTION

The Client, Iziko Museums of South Africa, hereon referred to as the Employer, requires new LED lighting to a proposed new steel stair THE NATIONAL MUSEUM at 25 Queen Victoria Street Cape Town. A new stair lift (power point only) will also be part of the works.

### 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

A new steel stair will be installed by a structural steel contractor. The handrails require recessed LED track lighting in these handrails to supply illumination to the stairs. The power supply to the LED lights in the handrails will be fed from an existing light switch nearby.

A stair lift will be installed once the steel stair construction is completed. The power supply to the stair lift will be determined on site once this unit is ready for installation.

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

### GENERAL

The electrical contractor is to work closely with the structural steel contractor and the Electrical Engineer for the installation of the LED strip lights. Measurements to be taken on site and not off the drawings. Specific angle cutting of the aluminium track will be needed on site to ensure a continuous row of lights with no joints visible.

The power supply to these two rows of LED strip lights (see drawing 100E Rev.1 will be fed from an existing light switch nearby on the top end of the stair. The supply conduit to be taken down the drywall partition and then chased into the screed to reach the two supply points. The existing carpets will be removed and re-instated by others.

Another light switch to be added to the existing ones to switch these strip lights.

The power point to the stair lift is covered under Provisional Sums until such a time more information is available.

All work on this project to be executed as per attached drawings and Bills of Quantities.

### 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.

## SCOPE EXCLUSIONS

Excluded from this scope of work are the following:

- a) Structural work.
- b) Mechanical work
- c) 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.

## 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:

**202401-10/E100 Rev.1 Lighting Layout A2**

## HEALTH AND SAFETY

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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.

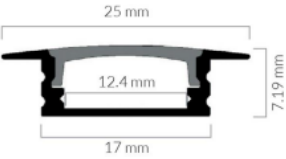
If the Contractor should fail to notify the Engineer within seven (7) days that there will be a cost increment associated with the proposed variation, it will be assumed in default that no cost variation is applicable.

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 Contractor's claim is however final.

## **ADDENDUM A: LIGHT FITTING SCHEDULE**

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ITEM	TYPE	DESCRIPTION	PICTURE
1	LED STRIP LIGHT	PIOLED SLIM 27 ALUMINIUM TRACK CH 51 WHITE COMPLETE WITH 12v/24 DC STRIP LED LIGHT FITTED COMPLETE WITH OPAL COVER AND ENDCAPS THE POWER SUPPLIES TO BE INSTALL AS PER POSITION ON THE DRAWING	 <p>25 mm</p> <p>12.4 mm</p> <p>17 mm</p> <p>7.19 mm</p>