

Project number: MCP2160079

Project name: OR Tambo International Airport (ORTIA) - 20"Jet Fuel Feeder Line
Client: Airports Company South Africa SOC Limited

| Item<br>No | Pay<br>Ref | Description  | Unit | Qty | Supply<br>Rate | Install<br>Rate | Amount<br>R c |
|------------|------------|--|------|-----|----------------|-----------------|---------------|
|            |            | SCHEDULE F: ELECTRICAL WORKS   |      |     |                |                 |               |
|            |            | SECTION 1: POWER AND CONTROL CABLING AND   |      |     |                |                 |               |
|            |            | TERMINATIONS   |      |     |                |                 |               |
|            |            | Cables are measured by length as installed from termination to termination. Separate items are scheduled for each section, type and size of cable installed. Cables on racking, in conduit or in ground are not kept separate. The rate covers the cost of supplying the cable, shrouds, tags, labels and stainless steel straps, clamps and trefoil clamps if required and for installing in    |      |     |                |                 |               |
|            |            | terms of the works information complete with identification, tagging and labelling and fixing at all levels, in all planes, in conduit, to racking, laying in trench or cable duct etc and for the supply and fixing of all cleats, straps etc and the cost of handling, inspection, transporting, fixing, jointing, stripping as necessary for jointing etc. Joint and termination rate include |      |     |                |                 |               |
|            |            | supply of all consumables, material and kits necessary to join or<br>terminate cable. All work to be executed in accordance with the<br>ACSA Specification for Electrical Installation and SANS 10142-   |      |     |                |                 |               |
|            |            | CABLE  |      |     |                |                 |               |
| 1          |            | Supply and Install MOV Power Cable 4c x 4 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable   | m    | 150 |                |                 | -             |
| 2          |            | Supply and Install SP&L Power Cable 4c x 2.5 mm²,<br>600/1000V, Cu, PVC, PVC, SWA, PVC Cable   | m    | 50  |                |                 | -             |
| 3          |            | Supply and Install SP&L Cable Joints Power Cable 4c x 2.5 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable   | m    | 20  |                |                 | -             |
| 4          |            | Re-positioning of Instrument Supply Power Cable 4c x 2.5 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable  | m    | 10  | N/A            |                 | -             |
| 5          |            | Handling, Re-routing and Making Operationally Safe of all Existing Services for Electrical Cables, 11kV and 1kV Power Cable  | m    | 30  | N/A            |                 | -             |
|            |            | TERMINATIONS   |      |     |                |                 |               |
|            |            | The rate covers the cost of supplying and installing the cable gland, shrouds, lugs, bolts, washers, screws, tags, labels and every other pieces of materials required to do the terminations as per ACSA Specification for Electrical Installations and SANS 10142-1/2.   |      |     |                |                 |               |
| 6          |            | Supply and Install Terminations, for Zone2, Class 1, for MOV 4c x 4 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable   | each | 2   |                |                 | -             |
| 7          |            | Supply and Install Terminations, for Zone2, Class 1, for SP&L 4c x 2.5 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable  | each | 22  |                |                 | -             |
| 8          |            | Supply and Install Cable Joint kits for SP&L 4c x 2.5 mm², 600/1000V, Cu, PVC, PVC, SWA, PVC Cable   | each | 4   |                |                 | -             |
|            |            | SECTION 2: CABLE TRENCHING, RACKING AND SUPPORT  |      |     |                |                 |               |
|            |            | The rate covers the cost for supplying, delivery and installing the cable racking, complete with all necessary supports and fixing materials on steel and/or concrete columns, horizontal and/or vertical planes according to the ACSA Standard installation assemblies as listed  |      |     |                |                 |               |



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|            |            | CABLE TRENCHING  |      |     |                |                 |               |
| 9          |            | Open existing Cable Trench covers to install cables through sleeves in Sub 1 at the Storage Fuel Depot   | m    | 10  |                |                 | -             |
| 10         |            | Hand Excavation at Valve Chamber VCM1  | m³   | 5   |                |                 | -             |
| 11         |            | Re-instatement and making good of Hand Excavation Cable Trench at Valve Chamber VCM1   | m³   | 5   |                |                 | -             |
|            |            | STEEL CONDUIT  |      |     |                |                 |               |
| 12         |            | Supply and Install of 50mm HDG Conduit and Fixing Accessories.   | m    | 0   |                |                 | Rate only     |
| 13         |            | Supply and Install of 25mm HDG Conduit and Fixing Accessories.   | m    | 50  |                |                 | -             |
|            |            | CABLE RACKING  |      |     |                |                 |               |
| 14         |            | Supply and Install 150mm HDG OL76 Ladder Type Cable Rack on Existing and/or New Structural Supports.   | m    | 9   |                |                 | -             |
|            |            | SECTION 3: LV EQUIPMENT  |      |     |                |                 |               |
|            |            | The rate for erection or installation includes for supply or collecting from company store, taking delivery, unloading, rigging, unpacking, examining to verify that the articles or goods are complete and undamaged, stored, the reporting thereon in terms of the contract and the giving of receipt for such articles or goods, handling and transportation on site, installation or erection, labelling and painting in accordance with the Works Information. The rate includes all labour and supervision thereof, provision and installation of all material, fixing items and all tools etc. necessary for the installation of the said item, but excludes supply of the said item where indicated. All work to be executed in accordance with the ACSA |      |     |                |                 |               |
| 15         |            | Supply and Install Schneider, 3-pole, 10A, 5kA, Miniature<br>Circuit Breaker (Din rail mount) for MOV, including panel wire<br>and all necessary accessories to complete Circuit Breaker<br>installation   | each | 1   |                |                 | -             |
| 16         |            | Supply and Install appropriate Circuit Breaker label "Rotork D3" within DB (Brother machine labelling)   | each | 1   |                |                 | -             |
|            |            | SECTION 4: EARTHING  |      |     |                |                 |               |
|            |            | Allowance must be made for slack at joints, bonding, connections at sockets, light points, control equipment, electrical and non-electric metallic equipment. The rate covers the cost of provision of the earth wire, conductors and the complete installation in accordance with the ACSA Specification for Electrical Installation and SANS 10142.  |      |     |                |                 |               |
| 17         |            | Bonding of Electrical Equipment, Cable Rack and Non-<br>Electrical Metallic equipment to the Earthing System   | Sum  | 1   |                |                 | -             |
| 18         |            | Supply and install Copper Clad Steel Earth Cable (16mm^2 PVC/Cu Anti-Theft Conductor Equivalent), including Green and yellow sleeving.   | m    | 15  |                |                 | -             |
| 19         |            | Supply and install 1C x16mm² Cu Equivalent Insulated CCS Cable termination   | each | 4   |                |                 | -             |
|            |            |  |      |     |                |                 |               |



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|            |            | SECTION 5: LIGHTING AND SMALL POWER  |      |     |                |                 |               |
|            |            | The rate for erection or installation includes for supply or collecting from company store, taking delivery, unloading, rigging, unpacking, examining to verify that the articles or goods are complete and undamaged, stored, the reporting thereon in terms of the contract and the giving of receipt for such articles or goods, handling and transportation on site, installation or erection and painting in accordance with the Works Information. The rate includes all labour and supervision thereof, provision and installation of all material, labelling, fixing items and all tools etc. necessary for the installation of the said item, but excludes supply of the said item where indicated. All work to be executed in accordance with the ACSA Specification |      |     |                |                 |               |
| 20         |            | Supply and Install ALTSA A Series Ex Floodlight, 60W Lights (incl. all necessary supports and accessories). Refer to Lighting Datasheet  | each | 5   |                |                 | -             |
| 21         |            | Supply and install No.1 CCG 1000V, Zone 2, Ex e 4-way junction box complete with 6mm terminals.  | each | 6   |                |                 | -             |
| 22         |            | Supply and Install Zone 2, Class 1, 2-way Switch, refer to Switch Datasheet, or similar.   | each | 2   |                |                 | -             |
|            |            | SECTION 6: TESTING AND COMMISSIONING   |      |     |                |                 |               |
|            |            | Separate items are scheduled for testing motors, motor control centres and transformers and the installation generally. The rate covers the cost of testing specified in the Works Information for the electrical equipment and installation. All work to be executed in accordance with the ACSA Specification for Electrical Installation and SANS 10142.  |      |     |                |                 |               |
| 23         |            | Perform Meggar Tests and Record Results for All Cables   | Sum  | 1   |                |                 | -             |
| 24         |            | Test the Continuity of the Earthing System Bonding   | Sum  | 1   |                |                 | -             |
| 25         |            | Commissioning of Lighting Installation (Including conducting lux surveys).   | Sum  | 1   |                |                 | -             |
| 26         |            | Verification of Load Capacity on the existing Distribution Boards  | each | 2   |                |                 | -             |
| 27         |            | Complete Quality Control Checks for the Installation   | Sum  | 1   |                |                 | -             |
| 28         |            | Compile handover packages for All Installed Equipment as per ACSA Quality Requirement  | Sum  | 1   |                |                 | -             |
|            |            | SECTION 7: PRELIMINARY AND GENERAL   |      |     |                |                 |               |
|            |            | Contractor to provide a detailed breakdown of<br>Preliminaries   |      |     |                |                 |               |
| 29         |            | Fixed-charge And Value-related Items   | Sum  | 1   |                |                 | -             |
|            |            | Time-related Items   | Sum  | 1   |                |                 |               |