

Annexure C3.2:

1. Scope of work

Supply, install and connect mast lights at Fishing spot.

Design, construct and erect 25m scissor high mast lights.

Octagonal continuous tapered design.

One bottom unit is fixed, while the other will pivot to lower the top mounted equipment.

Internal counter – weights are fitted to enable gradual descent.

Design and Specifications:

- The masts will be designed in accordance with SANS 0225.
- The masts will be manufactured to ISO 9001: 2015.
- The masts are Hot Dip Galvanized to SANS 121/SABS 1461.
- All poles are manufactured from Grade GW355J HT steel and is manufactured in accordance with SANS 657/1&3.

Structure:

- The mast consists of a fixed lower section with a base plate secured by holding down bolts to the mast foundation.
- The top section is fitted to the fixed lower portion by slip fitted and steel pins passing through both sections and secured by nuts and bolts.
- The Headframe is fitted on the top section and secured by means of a slip joint.
- The hinge/counter – balance sleeve is secured with a round steel pin that passes through the side plates of the fixed lower section.
- The hinge/counter – balance sleeve bottom section shall be secured to the fixed lower section by means of a bolt using a designed spanner to loosen the bolt.
- The hinge/counter – balance sleeve bottom section is also secured to the fixed lower section with a removable safety chain to prevent accidental or unplanned opening of the bottom sleeve section.
- Access (Rectangular shape) door is placed and accessible at the bottom section.
- The door is secured with a tamper proof screw.

- Electrical distribution board is mounted inside the access door.
- The trailing cable is plugged into the distribution board and is connected to the IP65 splitter box attached to the headframe.
- Flexible cables are used for the connection between the floodlight and the IP65 splitter box.
- The photocell is mounted at the lower section above the access door to control the on/off switching of the floodlights.
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Accessories:

- 25m height.
- Apron customized for weight balancing.
- Portable hand – winch for maintenance.
- Nylon rope for maintenance.
- Lighting spike on top of the headframe.
- Tamper proof key is provided for access.
- Test leads are available for testing purposes.

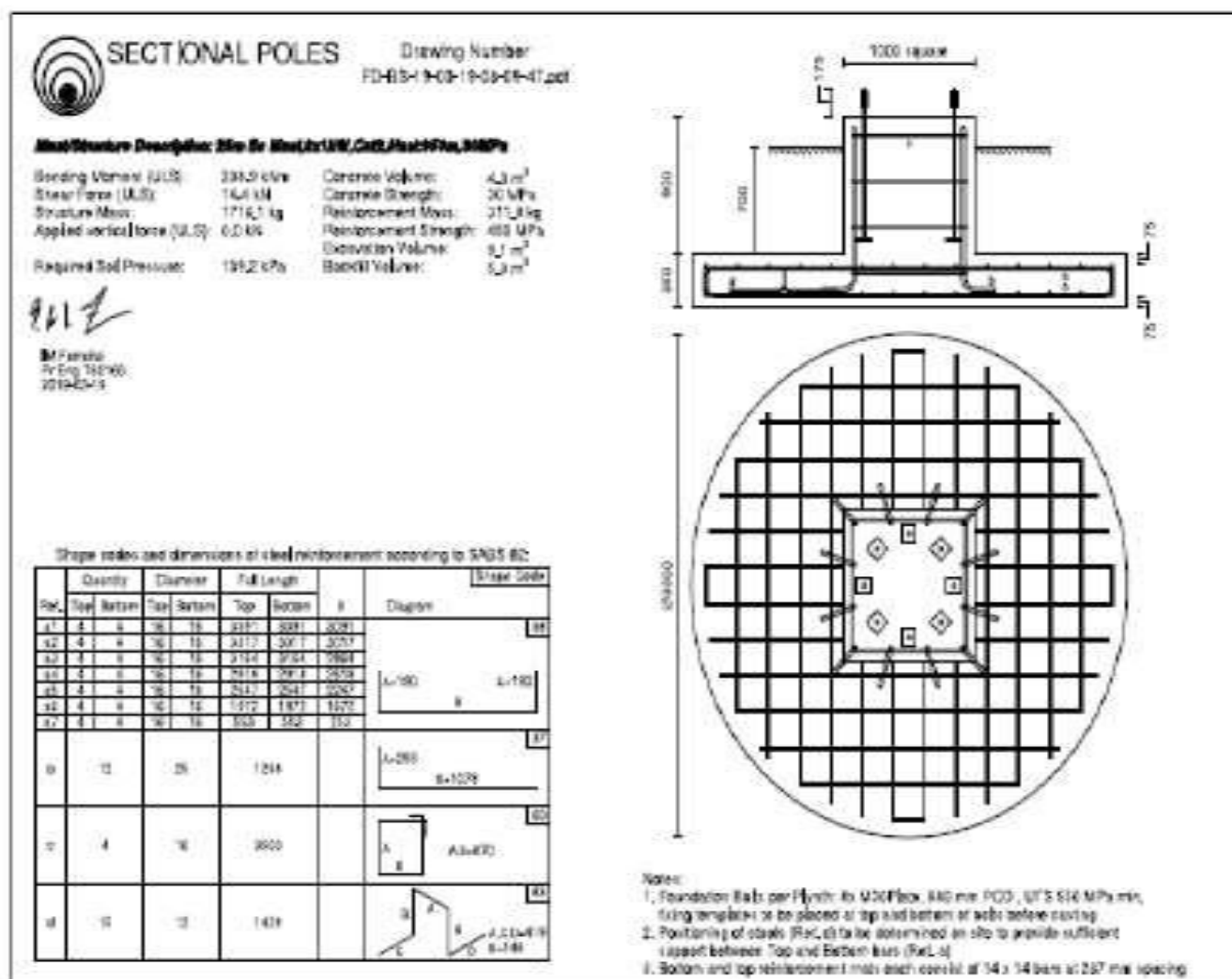
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Light fittings:

- 8 x LED light fittings per mast.
- 250W, 230V.
- LED chip type: Lumileds
- LED operating current(mA): 1000mA-1200mA
- Driver input voltage AC: 100V-240V
- Non – dimmable
- Driver surge protection: 10kV
- IP67
- Housing material: Metal

Plinth:

- Rand Water to get excavation permit.
- Contractor to excavate.
- Contractor to cast plinths with reinforcing and holding down bolts.
- Contractor to install masts on plinth



Line 02:**Excavations:**

Note: Rand Water to get excavation permits.

Cable excavations, 500mmx500mm

Length of cable excavations, 70m

Plinth excavation, as per drawing.

Contractor to close excavation after completion of work.

Line 03:**Electrical supply, 3 phase:**

- Cable size: 10mm² x 4core.
- Total length of cable: 100m.
- Contractor to excavate, install supply cables, connect and close trench.

Note:

Contractor to transport masts to location.

Contractor to commission and test mast lights.

Contractor to supply drawings and COC.



BID Number:10411143

Bid Description: Supply, Install and connect mast lights at Fishing spot