

SITE NAME MAST HEIGHT MAST TYPE

CMR, Muthaiga 27 Meters Guyed Mast

DCR, Tate House 30 Meters Guyed Mast

R6, Muthaiga Elizabeth House 27 Meters Guyed Mast

USAID, UN Avenue 24 Meters Guyed Mast

Rosslyn Ridge 30 Meters Guyed Mast

Nyari#388 27 Meters Guyed Mast

R12, Thigiri Ridge 36 Meters Guyed Mast

MAST BASE

GUY WIRES & ACCESSORIES

L/ARRESTOR Available, *Needs to be replaced*

MAST STRUCTURE

All masts are ground based and each has three ground anchors. The span from the mast base to the anchors is approximately 10 meters with the exception of the mast at R12 Thigiri, which has a span of approximately 12 meters. The anchors consist of steel plates embedded on reinforced concrete pads. *The existing concrete anchor pads adequate to support the masts.*

The guy wires on all the inspected masts are fiber core type, 6mm in size and they appear weathered. The guy wires are terminated to eye to eye type, M12 size turnbuckles with D-shackles. *All the existing guy wires will need to be replaced.*

Each of the mast has a base module embedded on concrete pad. We could not determine depth of the base pads.

Paintwork on the mast structures is faded but they are in repairable condition. There are radio equipment is installed on the masts.

Repainting is required

MAST ANCHORS

“Everything in Steel”

Scope of work

- The existing fiber core type guy wires are not suitable for the masts and need to be replaced
- Mast tensioning accessories will need to be replaced
- The lightning arrestor rods will need to be replaced
- The aviation lights will need to be replaced
- The mast structures need to be repainted

RECOMMENDATIONS:

- Installation of galvanized steel core type guy wires with a rating of 25KN breaking strength and preferably 6mm in size
- Installation of new M16 size turnbuckles with load rating of at least 1.2 ton each, these should either be Eye to Jaw or Eye to Eye type
- Installation of spiked lightning arrestor rods to be used with existing earth cables
- Installation of solar operated aviation light with 2 nautical mile visibility and 120 hrs. no charge autonomy
- Repaint existing structures with protective coats of metal paint in white and red bands

WARRANTY:

- Galvanized steel cables will come with a 5 year warranty and we undertake to replace any rusty lines within the Period at no extra cost
- The solar aviation lights will have a 5 warranty. The lights do however require replacement of internal battery once every 3 years and this will be done at no extra cost
- The protective paintwork will have a 5-year warranty

Once the recommended repairs are complete, we request the client to schedule and provide access once yearly to enable our team inspect the mast for any defects and take necessary remedial action. If the client notes any defect or occurrence at any time that might affect integrity of the structure, this must be brought to the attention of our team for timely remedial action.