



**Clarification 3 - Design and build of jetty and harbour upgrade in R.Rasgetheemu.**

- Details of existing Harbour structures, if available furnish the details with depth below sea bed?

Not available

- Type of sea bed, whether it is coral, sand bed. If it is coral can it be dredged?

Sea bed in most areas will be coral / sand or a mix of both and it will be possible to dredge using an excavator in those areas. However, there might be hard strata or reef limestone in some areas which cannot be removed by an excavator bucket and will require additional mechanical devices to remove them.

- Littoral draft study details if available for the project area?

Sediment dynamic studies are not available.

- Bathymetry survey available may be transmitted for design structure accordingly?

Not available.

- Type of vessel berth, location of large vessel / smaller may be marked?

Largest vessel that will use the harbour will have an LOA of 30m and a loaded draft of 2m. Main quay wall and side quay walls should be provide safe berthing of these vessels.

- The mooring pull depends on the type of vessel in laden condition the details are needed?

Mooring force maybe calculated from DWT or GWT of the vessels. GWT and DWT can be estimated from vessel dimensions or the actual can be obtained from the Ministry of Transport. Normally each mooring hook is designed for a pull of 1 ton

- Please confirm that whether any concrete platform or floating platform to be proposed along the break water. If so please confirm the details

No. Not needed



- To design wharf floor, total quantity of materials stock / to be transported in the RCC Jetty?

Quay walls should be designed for a surcharge loading of 2 ton per square meter. Jetties or other adjoining structures to the main quay wall should be designed to support a moving load of 4 tons.

- Please confirm that any handrails to be made along the walk way of the Jetty?

No. Not needed

- For GI members microns mentioned 80, whereas in market available 50.

50 microns is too thin. We want 80 microns minimum.

- The hydro graphic survey data to be furnish for soil strata to decide mode / type of pile to be designed?

Geotechnical data not available. For preliminary design purposes you can assume internal friction angle of soil as 30 degrees and Soil density as 18 kN/m<sup>3</sup>

- Lighting poles coating fewer than 100 microns can it be aluminum painting?

No. Not acceptable.

- Feasible working season (tidal wise)?

[Eastern monsoon is from Dec to April and waves are predominantly from North East side and South East sides with large swells from South East side. Western Monsoon is from April to November and waves are predominantly from North West side and South West side. Please follow local weather data to better understand rainfall, wind and wave patterns across the country throughout the year. Tides remain relatively constant throughout the year with occasional HAT and LAT as per the lunar cycle. Tidal range from MHWL to MLWL is approximately 1m and follows a semidiurnal pattern]

- Land are available for labour camp, store & office area?

Land will be available from island but exact location has to be confirmed from council.



- Do we allow to use rock boulders in the existing break water at existing harbour?

You can use it. As this is a design and Build contract the winning contractor has to make sure (with calculations) that the rocks at the site are appropriate size to use in the breakwater/revetment.

- In the revised concept for R. Rasgatheem please clarify to us if the reclaimed area next to the Groynes will work as this area is sand-filled without any protection and is right adjacent to the harbour basin. Please check the marked concept drawing.

The area marked is a beaching area.

