Collaboration Program with JICA-MOC for Disseminating Construction Soil Improving Method (Twister Method)



PROJECT CHRONICLE / SITE PROGRESS

Contents	s Task	Page No.
Part 1	Site Preparation Works	1 – 13
Part 2	Twister Plant Delivery, Assembly & Calibration	14 – 24
Part 3	Trial Test Section & Road Construction	25 - 32



Discussion with MOC on site



Paddy field harvesting done



Dry paddy stalk, threshing machine leftover



MOC machines allocated on site for site clearance



Threshing machine has been removed, only dry paddy stalk leftover.



Earth bunds were erected by excavators to indicate site boundary.



Existing access road from riverside to plant yard to be made good by MOC.



Existing RC slab and trees along the access from riverside to plant yard to be removed.



Low tide level at riverside will affect the productivity and unloading of equipment.



MOC machines allocated on site for site preparation



Site was 80% cleared and graded.



Unwanted soil were stockpiled and to be disposed.



Existing access road from riverside to plant yard was widened and made good by MOC.



Existing brick slab was removed; trees obstructing the access to be removed shortly.



Tide level was increased due to heavy rainfall.



MOC machines allocated on site for site preparation



Excavators were stockpiling the clay soil to level the plant yard with access road.



All unwanted soil and debris has been removed, the surface has been well graded



Existing access road from riverside to plant yard was widened and made good by MOC



Existing access road from riverside to plant yard was widened and made good by MOC



Tide level of the day at Jetty





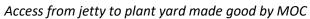
Twister tard soil levelling and grading done





Measurement and chalk marking by MOC-JDC







Jetty clearance done



Excavtion of Twister foundation



Soil levelling of slab foundation



Laying hardcore for the slab foundation



Compaction to be carried out before concreting



Concreting start after formwork erected



Part of slabs done concreting and continue for next slab



Erection of control room in progress (AM)



Erection of control room in progress (PM)





Joint measurement and marking of equipment location by JDC-MOC



Soil levelling for MOC site office



Slab concreting for JDC site office



Beginning of test section (23.50km)



Construction site information board (23.50km)



Brief information of test section (23.50km)



Sectional layout of test section (23.50km)



Control room next to Twister yard (site)



Information board on Twister Machine (site)



MOC site office (left) and JDC site office (right)



Exterior of control room



Twister machine yard RC slab completed



MOC machines allocated on site for construction



Access from Jetty to plant yard made good by MOC



Jetty is well prepared for equipment unloading





Transloading of equipments (gensets, air compressor, parts of Twister machine) onto the barge at Bogale River





JDC office erection works ongoing







Tide of the day (1411hr)



Site visit by MOC Chief Engineer, U Khin Zaw



Cleaning of plant yard for equipment marking works





Unloading of mesh pallet (4 nos)





Unloading of mesh pallet done (4 nos)





Arrival of 1st barge with 40 ton crawler crane (1235hr)





Plan view of 1st barge with equipments



10 ton Trucks standby at site for transportation



Parking of the barge to the nearest shore





Unloading of BC4 onto the truck





Unloading of generators and air compressor





1st barge equipments unloading done (1408hr)





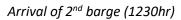
Inspection and stock checking of mesh pallet (4 nos)





Equipments base and footing marking done







Unloading of materials begin (1437hr)

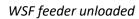




BC3 unloaded

BC2 unloaded







APF hopper unloaded





All equipments are transferring to the Twister plant area after unloading works done





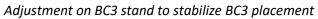
Allocation of Twister equipment parts to respective location





Setting of BC3 stand on particular locations (3 nos)







BC3 placement done













Placement of Twister main body TM-1500 in position done



Placement of Twister Belt Conveyor-3 (BC3)in position done



Placement of Belt Converyor-1 (BC1) & Belt Conveyor-2 (BC2)in position done



Placement of Apron Feeder (APF) & Cohesive Soil Feeder (WSF) in position done



Placement of Screw Feeder (SF) for input of additive in position done

Calibration Workflow







Preparation of machinery, material (lime), crane scale, perforated PVC pipe, ton bag







SF to be calibrated at 3 frequency (50Hz @120sec, 65Hz @90sec, 80Hz @75sec) for 3 times





New ton bag will be used if previous ton bag is half full.

^{*}Each measurement will be recorded and tabulate to work out the Frequency Calculation Formula.



Assembly, Testing and Commissioning of Twister Plant Completed...