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CIRCULAR

Sub : Design works carried out in Earth Dam Circle, Central Designs Organisation, Nashik - 4.

Ref: 1) GOM ID's Circular No. CDO1084/(385/84) PRJ-2 dt. 31/12/84.

2) GOM ID's Circular (Marathi) No.CDO1097/(163/97) MP (Adm)

Date 26/9/97.

1.0 In the above Govt. Circulars, the procedure regarding the preparation of designs and drawing of major, medium and minor irrigation projects have been laid down for the Central Designs Organisation and field officers. The following types of designs related to earth dam are carried out in Earth Dam Circle of C.D.O., Nashik - 4.

A) <u>Major Dams</u>: The general layout of major dams is prepared in Central Designs Organisation. The detailed designs of earth dam sections, for all major dams are finalised in this office, along with designs of under seepage control measures, instrumentations and junctions with key wall of earth dam and masonry dam.

B) Medium Dams: The general layout of medium projects is generally prepared by the field Chief Engineers. If required, the C.D.O. may propose the modifications in general layout on the technical details. The detailed designs of earth dam sections, for all medium dams are finalised in this office, along with designs of under seepage control measures, instrumentations, and junctions with key wall for earth dam and masonry dam.

C) Minor Irrigation Dams having height more than 30 m.: The detailed designs of earth dam sections for minor irrigation dams having height more than 30 m. are carried out in this office, along with designs of under seepage control measures and junctions with key wall of earth dam and masonry dam, if any.

D) Minor Irrigation Dams having height less than 30 m.: For earth dams having height between 15 m. to 30 m., only the stability analysis of the cross sections are checked in this office. The designs of under seepage control measures & junctions etc., are to be finalised by the field officers. The dams having height less than 15.0 m. and / or dams having special problems such as earthquake, foundation, or embankment material etc., may be referred to this office for design if field officer so desires.

- E) Designs for strengthening of existing dams and any special problems related to designs and allied works of any completed project, or during the construction are also studied in this office, and remedial measures are suggested.
- It is experienced that, in some cases, the earth dam sections are assumed 2.0 tentatively on the basis of administrative approval and estimates are finalised at field level. Also in some of the cases, it is experienced that the work is started based on the tentative section before referring the designs to C.D.O. Similarly, the under seepage control measures such as C.O.T. filling etc. are generally completed before referring the designs to C.D.O. Then, it becomes very difficult to sort out the problems of designs in such cases. The under seepage control measures play vital role in the designs as well as in the efficient functioning of the earth dam.
- Therefore, it is brought to the notice of all the field officers that earth dam 3.0 embankment work, under seepage control measures, junctions with key wall and instrumentation etc. shall be executed as per the detailed final drawings issued by the Central Designs Organisation. The required designs & drawings will be issued timely if the field data is supplied to Central Designs Organisation well in time.

Superintending Éngineer (E.D.) Central Designs Organisation Nashik - 4.

No.CDO/ED/ED.2/Circular/ 503 / 1140 /2001

Earth Dam Circle Central Designs Organisation Dindori Road, Nashik - 4.

Dated: 14/8/2001.

Copy respectfully submitted to the Chief Engineer (P & V) & Joint Secretary, I.D., Mantralaya, Mumbai, for favour of information please. Copy respectfully submitted to the Chief Engineer

for information and necessary action please.

Copy forwarded with compliments to the Superintending Engineer MD / Gates /

PH / DSO. C.D.O. Nashik, for information please.

Copy to the Executive Engineer, E.D.2, 3, 4/and W.P. Division C.D.O. Nashik, for information and necessary action.