

PLANNING, DESIGNS AND INVESTIGATION

The Planning, Designs and Investigation wing is entrusted with field investigation and preparation of Detailed Project Report for river bridges, grade separators, Road over bridges (ROB)/Road under bridges (RUB) proposed to be executed by various wings of the Highways department.

This wing has five Investigation Divisions at Chennai, Madurai, Tirunelveli, Salem, Coimbatore and four Designs Divisions at Chennai with one Joint Chief Engineer and is headed by the Chief Engineer.

ACTIVITIES OF THE WING:

INVESTIGATION DIVISIONS AND THEIR ACTIVITIES

The Investigation Divisions undertake the following field works:

Field Investigation and Sub-Soil Exploration:

- Detailed investigation at proposed bridge site and collection of field data.
- Obtaining required particulars from Public Works Department for River Bridges and from Railways for ROB and RUB works.
- Sub-soil investigation through exploratory bores to ascertain the bearing capacity of the sub-soil and to decide the foundation of the bridges.

Preparation of Detailed Reports and Drawings:

- Preparation of site plans incorporating all the field details.
- Preparation of alignment drawings and getting approval from the alignment committee.
- Preparation of cross sectional and longitudinal sectional drawings along the stream & alignment and computation of hydraulic particulars.
- Recommendation of suitable proposals based on field investigation and sub-soil exploration.

DESIGNS DIVISIONS AND THEIR ACTIVITIES:

The activities of Designs Divisions are as follows:

- Preparation of designs, drawings, and quantity estimates for river bridges, ROBs, RUBs, grade separators and other highway structures.
- Proof checking the alternative designs furnished by the bidders and according approval.
- Proof Checking the Detailed Project Reports prepared by the consultants who are engaged by various wings of the department.
- Re-designing the bridges and other components, if warranted, in accordance with the sub-soil conditions during execution.
- Scrutinizing and giving recommendations to facilitate the issue of permit for non-standard heavy motor vehicles to ply on roads.
- Scrutinizing and according approvals for the structural design of bridges to be constructed by other Departments.

WORKS COMPLETED IN 2015-16:

- Preparation of design, drawings and estimate for 10 ROBs / RUBs, 20 river bridges, 2 Limited use subways, 1 Grade Separator and revised design for 7 bridge works have been completed.
- Technical guidance for restoration of retaining wall in the hill road leading to a Arthanareeswarar temple at Thiruchengodu was also offered.
- In addition, design and drawings prepared by the consultants for 2 ROBs / RUBs, 8 river bridges, 5 flyovers, 2 foot over bridges, 2 pedestrian subways and revised design for 1 bridge work were proof checked.
- Totally, 61 works have been completed by this wing during the year 2015-16.

WORKS COMPLETED (UPTO JANUARY 2017):

- Preparation of design, drawings and estimate for 6 ROB / RUBs / LUS, 18 river bridges, 1 Foot over bridge, 1 Pedestrian subway and design for construction of retaining wall at km 16/2 of NH207 (Sarjapur-Pagalur-Hosur Road) including stability check of bridge at Southern Sector IRR for the erection of scaffolding of MRTS station works have been completed.
- Further, 18 numbers of revision / modification in river bridges, ROB / RUB / FOB, grade separators have been completed.
- Apart from these proof checking for construction of 3 river bridges, 1 Foot over bridge and 1 Limited use subway, totaling 51 works have been completed by this wing upto January 2017 during the year 2016-17.

PROGRAMME OF WORK (FROM FEBRUARY 2017 TO MARCH 2017) AND EXPECTED WORKS IN THE YEAR 2017-18:

- During the current year (from February 2017), preparation of design, estimate and drawings for 31 ROB / RUBs and 1 Grade separator totalling to 32 works are in hand.
- In addition, DPR works prepared by consultants for 13 ROB / RUBs, 4 river bridges, 5 grade Separators, 1 pedestrian subway, 3 flyovers, bridges in Chennai Peripheral ring road, 1 cart track bridge for TANGEDCO and totalling to 28 works are also in hand for proof checking.
- Further, preparation of design, estimate and drawings for 10 river bridges, 18 ROB / RUBs and Elevated Highway along Avinashi Road in Coimbatore city are proposed to be taken up.
- As on date 60 works are in hand and in addition to that 29 works for which particulars are yet to be received (as stated above) and works that are expected to be received during the financial year 2017 – 18 are also to be taken up.