

No. 12014/3/2015/Goa/P-6  
Government of India  
Ministry of Road Transport & Highways  
(Zone-IV)  
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dt 24.08.2020

To,

Sh. Alok Goyal (Additional Proof Consultant engaged by the State PWD, Goa), Professor, IIT Bombay.

**Subject:** - Collapse of scaffolding for the project of construction of approaches in km 531.934 to km 536.250 for Bridge across river Zuari of existing NH-17 (New NH-66) on Panjim-Mangalore section in the state of Goa (Package-III) on EPC mode.

**Ref.:** - Action Taken Report submitted by CE (NH,R&B) PWD Goa vide letter no. PWD/CE(NH,R&B)F.MORTH/2019-20/273 dated 27.02.2020.

Sir

This is in reference to the collapse of scaffolding which took place on 13.03.2019 at the construction site of Zuari bridge (Package-III).

2. State PWD has informed that the scaffolding system for one of span of flyover had fallen down on 13.03.2019. Ministry has taken the cognizance of the sad incident and appointed immediately an Expert Committee on 28.03.2019 for submitting a report incorporating causes for collapse of scaffolding ; suggesting remedial measures; assessing responsibility of various stake holders; review of design of temporary works; and suggesting preventive steps for avoiding such incidents in future etc.

3. Review of design and drawing by IIT Bombay, appointed as additional Proof Check Consultant by State PWD was found to be inadequate by the Committee.

4. A meeting was held on 21.08.2019 under the chairmanship of Hon'ble Minister (RT&H and MSME) which was attended by all the stakeholders including you to discuss this issue wherein it was directed to seek explanation from all stakeholders on this issue. In this regard, State PWD vide letter dated 25.09.2019 and subsequently vide letter dated 18.02.2020 instructed you to submit a written explanation addressing the issue of collapse of scaffolding for the above project. In response, you vide letter dated 25.02.2020 has stated the following:

*"Since our scope doesn't include review of supporting system (shuttering, scaffolding), we had two options: (1) send the drawings back without review, or*

(2) review the drawings and calculations whatever submitted to us and give the following comments to cover the most common mistake likely to occur at site regarding the bracing of vertical props-given below for ready reference:

We shall appreciate if you could issue the following sight instructions for form work:

- a. Triangular Trestles should be in plumb and tied by horizontal / diagonal members in two orthogonal directions.
- b. Plumb check (for vertically) and sound check for tightness should be conducted on trestles before casting.

However the effectiveness of horizontal and diagonal bracing as placed during construction was much lower than that was expected in design and in our review.”

5. In the light of the your explanation given above , you are suggested to be more cautious in future to avoid such incident in future.

Yours faithfully,



(Praveen Kumar)  
Assitt. Executive Engineer (Zone-IV)  
For Director General(RD) & Spl Secretary

**Copy for information to: -**

1. PS to Hon'ble Minister (RT&H&MSME), New Delhi
2. APS to Hon'ble Minister of State (RT&H), New Delhi
3. PPS to Secretary, MoRT&H
4. PPS to DG(RD)&SS, MoRT&H
5. CE(Z-IV), MoRT&H
6. CE(NH) PWD Goa
7. CE-RO, RO MoRT&H Mumbai.

Copy to Director (NIC):It is requested to upload this letter on Ministry's website