सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport and Highways, Government of India)
जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली - 110 075 • G-5 & 6, Sector-10, Dwarka, New Delhi-110075
दूरभाष/Phone : 91-11-25074100 / 25074200

NHAI/Policy Guidelines/ Miscellaneous/2023
Policy Circular No.18.93/ 2023 dated 28th November, 2023

{Decision taken on E-office file No. NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6) (Comp. No. 201781)

Sub: Inspection of failed structures such as Bridges, Overpasses, Underpasses etc. during Construction or O&M Period by the Bridge Experts - reg.

Vide Policy Guidelines No. 18.51 dated 28.08.2020 on Standard Operating Procedures (SOPs) in case of failure of structural components on National Highways, it has been decided that a Committee of 3 experts chosen from the empaneled list in the field of structures (Bridges/ Flyovers/ ROBs/ RUBs, etc.) will be deputed by Technical Division with the approval of Member concerned to visit the site within 24 hours of incident in order to carry out technical analysis to find the reasons of failure along with fixing the responsibility for failure and submit its preliminary report within 3 days and final report in 7 days to Member concerned.

2. The list of empaneled bridge experts for inspecting and analyzing the reasons for failure of structures was notified vide NHAI Policy Guideline No. 18.53 dated 29.09.2020 (amended as Policy Guideline No. 18.54) and further updated vide NHAI's Policy Guideline No. 18.87 dated 25.05.2023.

3. In continuation to above, the list of empaneled bridge experts for inspecting and analyzing the reasons for failure of structures is hereby updated as under: -

Sl. No.	Name of the Bridge Expert (S/Sh.)	Agency	Contact No.	E-mail Address
1	Mahesh Tandon	M/s. Tandon Consultants Pvt. Ltd.	9818958090	mahesh.tandon@tcpl.com
2	R. K. Pandey	Member- NHAI (Retd.) ADG- MoRTH (Retd.)	8376900509	rkpandey57@hotmail.com
3	H. Subbarao	M/s. Construma Ltd.	9833055968	h.subharao@construma.com
4	A. K. Shrivastava	ADG- MoRTH (Retd.)	9818314688	aks5858@yahoo.in
5	Venkatram P.G.	M/s. L&T Infrastructure Engineering Limited	9445392393	pgvenkatram@gmail.com
6	S. K. Sharma	Pr. Tech. Officer - Bridges CRRI (Retd.)	9810825663	surjit2412@gmail.com
7	Alok Pandey	M/s. Elegant Engg.	9871606573	alok_elegant@rediffmail.com
8	Aditya Sharma	M/s. Rambol	9811517222	aditya.sharma@rambol.com
9	Alok Bhowmick	M/s. B & SECPL	9811175255	bsec.ab@gmail.com
10	S. K. Nirmal	DGRD- MoRTH (Retd.)	8376900507	sknirmal@hotmail.com
11	Ashok Kumar Mathur	E.D. - RITES (Retd.)	9871092399	ashokmathur@gmail.com
12	Dinesh Kumar Gupta	C.P.M. - UPSBCL (Retd.)	9415701218	dineshmbd63@gmail.com
13	Venkataramana Gopala Heggade	M/s. Decon Complete Solutions	8976068190	vnheggade@gmail.com

Contd...2/-

4. All other terms and conditions of Policy Guidelines No. 18.51, 18.53 (amended as Policy Guideline No. 18.54) and 18.87 will remain unchanged (**copy attached for reference**).

5. This issues with the approval of Competent Authority.

28/11/23

Encl.: As stated above

(Sanjay Kumar Patel)
General Manager (Coord.)

To:

All Officers of NHAI HQ/ ROs/ PIUs/ CMUs/ Site Offices

Copy to:

1. Hindi Division for translation in Hindi.
2. Library for hosting the circular on library site.
3. Web Admin for circulation.

NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6)

695781/2023/GM (COORD) Office

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

सत्यमेव जयते

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दूरभाष/Phone : 91-11-25074100 / 25074200

NHAI/Policy Guidelines/ Miscellaneous/ 2023
Policy Circular No. 18.87/ 2023 dated 25th May, 2023

{Decision taken on E-Office File No. NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6) (Comp. No. 201781)}

Sub: Inspection of failed structures such as Bridges, Overpasses, Underpasses etc. during Construction or O&M Period by the Bridge Experts - reg.

Vide Policy Guidelines No. 18.51 dated 28.08.2020 on Standard Operating Procedures (SOPs) in case of failure of structural components on National Highways, it has been decided that a Committee of 3 experts chosen from the empaneled list in the field of structures (Bridges/ Flyovers/ ROBs/ RUBs, etc.) will be deputed by Technical Division with the approval of Member concerned to visit the site within 24 hours of incident in order to carry out technical analysis to find the reasons of failure along with fixing the responsibility for failure and submit its preliminary report within 3 days and final report in 7 days to Member concerned.

2. The list of empaneled bridge experts for inspecting and analyzing the reasons for failure of structures was notified vide NHAI Policy Guideline No. 18.53 dated 29.09.2020 (amended as Policy Guideline No. 18.54).

3. In continuation to above, the list of empaneled bridge experts for inspecting and analyzing the reasons for failure of structures is hereby updated as under: -

Sl. No.	Name of the Bridge Expert (S/Sh.)	Agency	Contact No.	E-mail Address
1	Mahesh Tandon	M/s Tandon Consultants Pvt. Ltd.	9818958090	mahesh.tandon@tcpl.com
2	R. K. Pandey	Retd. Member, NHAI (Retd. ADG MoRTH)	8376900509	rkpandey57@hotmail.com
3	H. Subbarao	M/s Construma Ltd.	9833055968	h.subharao@construma.com
4	A. K. Shrivastava	ADG (Retd.) MoRTH	9818314688	aks5858@yahoo.in
5	Venkatram P.G.	M/s L&T Infrastructure Engineering Limited	9445392393	pgvenkatram@gmail.com
6	S. K. Sharma	Pr. Tech.Officer - Bridges (Retd.), CRRI	9810825663	surjit2412@gmail.com
7	Alok Pandey	M/s Elegant Engg.	9871606573	alok_elegant@rediffmail.com
8	Aditya Sharma	M/s Rambol	9811517222	aditya.sharma@rambol.com
9	Alok Bhowmick	M/s B & SECPL	9811175255	bsec.ab@gmail.com
10	S. K. Nirmal	DGRD (Retd.) MoRTH	8376900507	sknirmal@hotmail.com

Contd...2/-

NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6)

695781/2023/GM (COORD) Office

4. All other terms and conditions of Policy Guidelines No. 18.51 and 18.53 (amended as Policy Guideline No. 18.54) will remain unchanged (copy attached for reference).

5. This issues with the approval of Competent Authority.

Encl.: As stated above

25/05/23

(Sanjay Kumar Patel)
General Manager (Coord.)

To:

All Officers of NHAI HQ/ ROs/ PIUs/ CMUs/ Site Offices

Copy to:

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NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6)

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Annexure - II

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय)
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G-5 & 6, Sector-10, Dwarka, New Delhi-110075

दूरभाष / Phone : 91-11-25074100/25074200
फैक्स / Fax : 91-11-25093507 / 25093514

Dated: 1st October 2020

NHAI/Policy Guidelines/Miscellaneous/2020
Corrigendum to NHAI/Policy Guidelines No.18.53/2020 dated 29.09.2020

Sub: Inspection of failed structures such as Bridges, Overpasses, Underpasses etc. during Construction or O&M Period by the Bridge Experts.

Following correction is made to the Policy Guidelines No.18.53/2020 dated 29.09.2020 on the above cited subject:

For:

NHAI/Policy Guidelines /Miscellaneous Guidelines/2020 No.18.53 dated the 29th September, 2020.

Read:

NHAI/Policy Guidelines /Miscellaneous Guidelines/2020 No.18.54 dated the 29th September, 2020.

(Digvijay Mishra)
Chief General Manager (Coord.)

To,

All Officers of NHAI HQ/RO/PIU/CMU

Copy to:

PS to Chairman
All Members / CVO
Hindi Division for translation in Hindi

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय)
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फैक्स / Fax : 91-11-25093507 / 25093514

NHAI/Policy Guidelines/Miscellaneous Guidelines/2020
No. 18.53 Dated the 29 September, 2020
[Decision taken on File No. NHAI/SRD&Q/Bridge -Cell/Peer-Review/2020 (Computer File no. 28610)]

Sub.: Inspection of failed structures such as Bridges, Overpasses, Underpasses etc. during Construction or O&M Period by the Bridge Experts.

Vide Policy Guidelines no. 18.51 dated 28.08.2020 on Standard Operating Procedures (SOPs) in case of failure of structural components on National Highways, it has been decided that a committee of 3 experts chosen from the empanelled list in the field of structures (Bridges/ Flyovers/ ROBs/ RUBs, etc.) will be deputed by Tech. Division with the approval of Member concerned to visit the site within 24 hours of incident in order to carry out technical analysis to find the reasons of failure along with fixing the responsibility for failure and submit its preliminary report within 3 days and final report in 7 days to Member concerned.

2. In continuation to above, it has been decided to empanel the following bridge experts for inspecting & analysing the reasons of failure of such structures.

Sl. No.	Name of the Bridge Expert (S/Sh.)	Agency	Contact No.
1	Mahesh Tandon	M/s Tandon Consultants Pvt. Ltd.	9818958090
2	Vinay Gupta	M/s Tandon Consultants Pvt. Ltd.	9810090333
3	Ravi Kant Gupta	M/s Bridgecon India	9810518048
4	Venkatram P.G.	M/s L&T Infrastructure Engineering Limited	9445392393
5	V.L. Patankar	DG (RD) & SS (Retd.), MoRTH	9810431463
6	S.K. Sharma	Pr. Tech. Officer - Bridges (Retd.), CRRI	9810825663

3. The Terms of Reference (TOR) for the Bridge Experts are mentioned in **Annex-A**.

4. This issues with the approval of Chairman.

(Digvijay Mishra)
CGM (Coord.)

To,
All Officers of NHAI HQ/RO/PIU/CMU
Copy to:
PS to Chairman
All Members/CVO
Hindi Division for translation in Hindi

Annexure-A

Terms of Reference for the Bridge Experts

1. The bridge expert shall be the part of expert committee to be deputed to site to inspect the failed structure such as Bridges, VUP, VOP, Flyovers etc. in NHAI projects.

2. There shall be no conflict of interest of the expert with the Contractor/ Concessionaire/ AE/ IE/ SC etc. associated with the project.

3. The committee shall assess entire system in place by the Contractor/ Concessionaire/ Consultant for construction/ maintenance of bridges and its level of implementation, supervision and control. The committee shall also verify compliance to specified requirements as published by IRC, MoRTH, NHAI, BIS & as per good engineering practices.

4. The committee shall carry out technical analysis and find the reasons of failure along with fixing the responsibility for failure and submit its preliminary report within 3 days and final report in 7 days to Member concerned. All relevant details/ documents shall be clearly mentioned in the report. The suitable remedial measures/ actions to restore the failed structures including restoration of further construction/ O&M activities shall also be recommended.

5. The committee shall adhere to the following timelines for completion of the assignment; starting from the date of assignment (T) by NHAI.

   a) Site visit, T1=T+1 day
   b) Submission of Preliminary Report, T2=T1+3 days
   c) Submission of Final Report, T3=T2+4 days

6. The experts shall not disclose any technical information & data relevant to the project to any third party without prior written permission from the NHAI.

7. The bridge experts may be paid the fees & expenses as under:

Sr. No.	Particulars	Amount payable
1	Fee for site visit or meetings at site	Rs. 30,000/- per day
2	Travelling expenses	Economy class by air; AC first class by train; AC taxi by road
3	Lodging & Boarding	Rs. 15,000/- per day (Metro Cities); or Rs. 10,000/- per day (in other cities); or Rs. 5,000/- per day (own arrangement)
4	Local conveyance	Rs. 2,000/-

Note:

a. Lodging, boarding and travelling expenses may be allowed only for those experts who are residing 100 km away from the place of meeting/ visit.
b. Delhi, Mumbai, Chennai, Kolkata, Bangalore and Hyderabad may be considered as Metro Cities.
c. The payment to the Bridge Experts will be released after submission of final report by the expert committee, by respective PIUs

NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(C) Annexure-I

695781/2023/GM (COORD)

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दूरभाष / Phone : 91-11-25074100/25074200
फैक्स / Fax : 91-11-25093507 / 25093514

NHAI/Policy Guidelines/Miscellaneous Guidelines/2020

No.18.51 dated the 28th August, 2020

[As per approval given by Chairman on
File No. NHAI/Tech./Bridge/2020 (Computer File no. 27014)

Sub: Standard Operating Procedure (SOP) in case of failure of structural components like Bridges, Overpasses, Underpasses, RE Walls, Retaining Walls, etc. on National Highways during Construction or O&M Period.

NHAI largely depends on construction through Contractors/ Concessionaires and supervision, monitoring etc. through IE/ AE/ Consultants. The construction work of road & structures is coordinated by Project Directors (PDs) and officers in PIUs, under a Regional Officer (RO) reporting to Member through Technical Division at HQ.

2. It has been observed that certain structural failures have taken place in the past during currency of the construction period and also during Operation & Maintenance period, leading to fatal accidents which are unfortunate happenings and call for stringent steps to prevent such incidents which are bringing bad name to the organization at large, apart from denting image of construction industry and engineering fraternity. Further, these incidents seriously question the credibility of the technical expertise of the stakeholders involved, be it design consultants, proof consultants, IE/ AE, contractors, concessionaires or PDs/PIU Officers concerned. Such accidents are a huge setback to the progress of the work besides causing loss to the public life and property.

3. While various circulars/ guidelines on quality/ inspection systems of NHAI/ IRC/ MoRTH are available for prevention of such accidents, a proper Standard Operating Procedure (SOP) needs to be spelt out to deal with such untoward incidents.

4. Accordingly, the following SOP need to be adhered to by all concerned to have a responsive post-accident mechanism in place.

(i) Immediately after receiving information on failure of any component of Road & Structures like Bridges, Flyovers, ROBs, RUBs, RE/ Retaining Walls, etc., ROs/ PDs concerned will reach the site without any delay. While moving to the site itself, they shall manage over mobiles the rescue operations including moving the injured to the hospital.

(ii) After reaching the site, they will assess the dangers like hanging parts of structures, if any and take necessary precautions to prevent any further damage to life and property. After assessing the site situation, RO/ PD shall inform concerned Member/ CGM on telephone within one hour of incident followed by e-mail report (preliminary) about the accident within 3 hours duly taking photographs/ video and samples for testing.

(iii) In case of casualty/ injuries, they will send a report to local District Administration in addition to the in-house efforts of taking the victims to the nearest hospital.

(iv) Plan for traffic diversion, if required, on account of the accident shall be put in place immediately with the signages installed appropriately to guide the traffic.

(v) ROs/PDs will prepare a detailed report on collapse of Bridges/ Flyovers/ ROBs/ RUBs/ RE Walls etc. as the case may be and submit it to NHAI HQ within 24 hours.

Contd to Pg-2

NHAI/SRD&Q/Bridge-Cell/Peer-Review/2020-Part(6)

695781/2023/GM (COORD) Office

(vi) A Committee of 3 Experts chosen from the empaneled list in the field of Bridges/ Flyovers/ ROBs/ RUBs, etc. will be deputed by Tech. Division with the approval of Member concerned to visit the site within 24 hours in order to carry out technical analysis and analyze the reasons of failure along with fixing the responsibility for failure and submit its preliminary report within 3 days and final report within 7 days to Member concerned.

(vii) Report submitted by the Expert Committee will be examined at NHAI HQ and deterrent actions will be initiated against individuals & firms responsible for the incident like Concessionaire/ Contractor & its personnel and Consultants & its personnel, AE/IE, Design Consultant, Proof Consultant, etc. including their debarment from NHAI projects. Further, action against the officers of NHAI shall be taken, if found guilty of dereliction of their duty.

(viii) Suitable remedial measures/ actions as suggested by the Expert Committee will be taken by RO in a time bound manner to restore the damaged Bridges, Flyovers, ROBs, RUBs, RE/ Retaining Walls, etc. including restoration of further construction/ O&M activities. PD/ RO will submit daily ATR till remedial measures/ actions are completed.

(ix) The Technical Report submitted by the Expert Committee and actions taken shall be shared with all the Technical Divisions, ROs and PDs to avoid recurrence of such incidents in other projects.

(Amarendra Kumar)
CGM (Coord.)

All Officers of NHAI HQ/RO/PIU/CMU/Site Offices

Copy to:

All Members/CVO
PS to Chairman
Hindi Division- for translation in Hindi