No. RW/NH-12014/03/2024/CG-ZoneWest (Comp. No. 242472) GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT & HIGHWAYS (Central Zone)

Transport Bhawan, 1, Parliament Street, New Delhi - 110001

Dated, the October, 2025

To,

The Principal Secretary,

Public Works Department,

Raipur, Chhattisgarh.

Subject: - One Time Improvement of existing road alongwith raising of certain submersible location in monsoon season in Ambikapur town (from km 375.600 to km 385.700) and in Sitapur town (from Ch. Km 433.850 to km 437.670) section of NH-43 on EPC mode in the State of Chhattisgarh under Annual Plan 2025-2026.

(Job No. NH-43-CG-2025-26/16)

Reference:

i. CE(NH), PWD vide their letter no. 887/NHDP-Cell/CE/NH/ dated 19.08.2025

Sir,

I am to convey the administrative and technical sanction of the President of India to the estimate amounting to Rs. 44.82 Crore (Rupees Forty-Four Crore and Eighty-Two Lakhs only) including agency charges and other charges.

- 2. The work has been assigned (Job No. NH-43-CG-2025-26/16). Job No. may be quoted in all future correspondence regarding this work.
- 3. The expenditure is debit-able to Major Head '5054' Capital Outlay on Roads & Bridges, 01-National Highways (Sub Major Head), 01.337 Road Works (Minor Head), 01 Works under Roads Wing, 01.02 Other Schemes, 01.02.73 Infrastructural Assets under demand No. '86'- Ministry of Road Transport & Highways for the year 2025-26.
- 4. In accordance with the orders contained in this Ministry's letter No. 24035/4/2008-P&M/PIC Vol II dated 23.2.2018 addressed to the State Public Works Department, if the cost of tender exceeds 5% of sanctioned estimated cost, the revised estimate be got sanctioned from the Ministry and all the works above Rs. 5.00 crore is to be taken up on EPC mode. Further, the tenders for the work shall be invited by adopting e-procurement/e-tendering procedure as per Ministry's Circular No. RW/NH-24035/4/2008-P&M/PIC dated 21.05.2011, in addition to guidelines issued by this Ministry's Circular letter No. RW/NH-11024/3/99/US(D-I) dated 09.03.2000, No. RW/NH-24035/4/2008-P&M dated 21.05.2010 No. NH-12037/67/2010LWE dated 02.08.2010 and RW/NH-34066/14/2018-S&R(P&B) dated 25.6.2018. The work shall be awarded as per guidelines issued by the Ministry vide letter No. NH-15015/29/2001-PL dated 05.07.2001.
- 5. It is requested that arrangements may be made for the submission of quarterly progress report in respect of this work by the Executive Engineer concerned to the Director General (Road Development) Government of India.

- 6. On completion of 50% work if the appraisal of the project shows that it will necessitate revision of the estimate based upon the physical completion of the project vis-à-vis financial expenditure immediate action should be taken to submit the revised estimate so as to ensure that the sanctioned revised estimate is available before necessary for incurring expenditure beyond permissible limits arises.
- 7. The technical approval and financial sanction may lapse after six months from the date of its issue in case the work is not awarded within that period.
- $8\,$. The Regional Officer, M/o RT&H, Raipur, Chhattisgarh will be Drawing and Disbursing Officer.
- 9. The following physical and financial target shall be strictly adhered to phasing of expenditure shall be as given below:

| | Cumulative progress (Cost Rs in Cr.) | | | | | |
|---------|--------------------------------------|-----------------------|--|----------------|--|--|
| | | Financial (Rs in Cr.) | | | | |
| Year | Physical | Construction | Maintenance (0.00 % for first, 0.5% for second, third and fourth years, 1.00% for fifth year; total 2.50%) | Total (Cr.) | | |
| 2025-26 | 10% | 4.37 | 0.00 | 4.37 | | |
| 2026-27 | 100% | 43.77 | 0.00 | 43.77 | | |
| 2027-32 | 100% | 43.77 | 1.05 | 44.82 | | |

- 10. This sanction issues with the concurrence of the Finance Wing vide Note #65 dated 13.10.2025.
- 11. The condition of the road should be recorded by the Network Survey Vehicle before the start of work and during the execution, completion and the defect liability period before payments are released and the same should be clearly specified in the tender documents/agreement.

Yours faithfully,

Encl: -As above.

(Shashi Bhooshan Kumar)

Under Secretary to the Government of India

Copy to with a copy of Technical Note forwarded to:-

- 1. The Principal Director of Audit, Economics & Services Ministries, IP Estate, New Delhi
- 2. The Accountant General, Chhattisgarh Administration, Pandri, Raipur-492002
- 3. The Regional Officer, Ministry of Road Transport & Highways, NH-Campus, Pension Bada, Raipur, Chhattisgarh.
- 4. The Chief Engineer (NH), Public Works Department, NH Campus, Pension Bada, Raipur, Chhattisgarh, 492001.
- 5. The Pay and Accounts Officer, Ministry of Road Transport & Highways, IDA Building, Jamnagar Houses, Shahjahan Road, New Delhi.
- 6. CE(East-II)/SE(East-II)/Guard file/Finance Wing/W&A Section

(Shashi Bhooshan Kumar)

Under Secretary to the Government of India

Digitally signed by SHASHI BHOOSHAN KUMAR Date: 17-10-2025 17:54:24

RW/NH-12014/03/2024/CG-ZoneWest (Comp. No.:242472)

Government of India Ministry of Road Transport & Highways (Central Zone)

Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: October, 2025

<u>TECHNICAL NOTE</u> (Job No.:-NH-43-CG-2025-26/16)

| 1. | Name of work | | One time improvement of ex submersible location in monsoon to km 385.700) and in Sitapur to section of NH-43 on EPC mode Plan 2025-2026. | season | in Am om Ch | nbikapur tov n. Km 433. | vn (from 850 to k | km 3 m 4 | 375.600 37.670) |
|----|--|---|--|--------|----------------|----------------------------|----------------------|-------------|--------------------|
| 2. | NH No | : | NH-43 | | | | | | |
| 3. | State and Division | : | Chhattisgarh & National Highway Division, Ambikapur | | | | | | |
| 4 | Estimated cost (Rs. in Crores) | | As submitted by State PWD Rs. 44.82 Cr | | | dified in the | e Ministry | ' | |
| 5. | Length in km | : | 13.92 | | 13.92 | | | | |
| 6. | Cost / km (Amount in Rs. Crores) | | 3.22 | | 3.22 | | | | |
| 7. | Reference | | Chief Engineer (NH), PWD, Raipur Memo No. 887/NHDP-CELL/CE/NH , Raipur dated 19.08.2025 | | | | | | |

COMMENTS

- 1. Scope of work: One time improvement of existing road alongwith raising of certain submersible location in monsoon season in Ambikapur town (from km 375.600 to km 385.700) and in Sitapur town (from Ch. Km 433.850 to km 437.670) section of NH-43 on EPC mode in the State of Chhattisgarh Under Annual Plan 2025-2026.
- 2. Following provisions have been allowed in the estimate as proposed by State PWD:
- **2.1 Overlay Design with flexible pavement and Rigid pavement design:** Falling Weight Deflectometer (FWD) test were performed along the project length as per IRC:115-2014. The Overlay shall be as follow:

| Sr. No. | Details | Thickness |
|---------|---------|-----------|
| (i) | DBM | 100 mm |
| (ii) | BC | 40 mm |

In addition to for construction of Rigid pavement as per field requirement, Rigid pavement has been designed as per IRC 58-2015. The details of provision of rigid pavement shall be as follow:

| Sr. No. | Details | Thickness |
|---------|---------|-----------|
| (i) | GSB | 150 mm |
| (ii) | DLC | 150 mm |
| (iii) | PQC | 290mm |

- 2.2 Providing 2.5 m wide interlocking paver block on both side in a length of 8.42 km (length of interlocking block-2x8.42 = 16.84 km).
- 2.3 Typical cross sections: The State PWD has submitted estimate for overlay with raising in selected stretch in existing carriageway width within available ROW. Following are the Chainage wise TCS details:

2.3.1 Typical Cross Section for overlay with raising in selected stretch in existing carriageway width:

| Sr. No. | From (km) | To (km) | Length (km) | Carriageway width (m) | TCS Type | Proposed Provisions by State PWD |
|------------|--------------|---------|----------------|--------------------------|-------------|---|
| 1 | 375.600 | 376.525 | 925.00 | 10.00 | TCS-1 | Overlay with 100mm DBM, 40mm |
| 2 | 376.750 | 377.250 | 500.00 | | | ВС |
| 3 | 377.500 | 377.700 | 200.00 | | | |
| 4 | 377.950 | 378.675 | 725.00 | | | |
| 5 | 378.850 | 379.325 | 475.00 | | | |
| 6 | 379.725 | 379.800 | 75.00 | | | |
| 7 | 376.525 | 376.750 | 225.00 | 10.00 | TCS-2 | Raising with GSB-200mm,WMM- |
| 8 | 377.250 | 377.500 | 250.00 | | | 250mm,DBM-100mm,BC-40mm |
| 9 | 377.700 | 377.950 | 250.00 | | | |
| 10 | 378.675 | 378.850 | 175.00 | | | |
| 11 | 379.325 | 379.725 | 400.00 | | | |
| 12 | 379.800 | 380.800 | 1000.00 | 2x7.5 | TCS-3 | Overlay with 100mm DBM, 40mm BC |
| 13 | 380.800 | 381.000 | 200.00 | 10.00 | TCS-4 | Overlay with 40mm BC |
| 14 | 381.000 | 382.600 | 1600.00 | 7.00 | 1 | |
| 15 | 382.600 | 383.550 | 950.00 | 10.00 | 1 | |
| 16 | 383.550 | 385.000 | 1450.00 | 15.00 | TCS-5 | Construction of rigid pavement, 150mm GSB,150mm DLC and 290mm PQC |
| 17 | 385.000 | 385.300 | 300.00 | 10.00 | TCS-6 | Construction of rigid pavement, 150mm GSB,150mm DLC and 290mm PQC |
| 18 | 385.300 | 385.700 | 400.00 | 7.00 | TCS-7 | Overlay with 100mm DBM, 40mm |
| 19 | 433.850 | 434.200 | 350.00 | | | BC |
| 20 | 434.425 | 436.175 | 1750.00 | | | |
| 21 | 436.525 | 436.725 | 200.00 | | | |
| 22 | 436.825 | 437.670 | 845.00 | | | |
| 23 | 434.200 | 434.425 | 225.00 | 7.00 | TCS-8 | Raising with GSB-200mm, WMM- |
| 24 | 436.175 | 436.525 | 350.00 | | | 250mm, DBM-100mm,BC-40mm |
| 25 | 436.725 | 436.825 | 100.00 | | | |
| To | tal Length | ı (km) | 13.92 | | | |

2.4 Culverts:

- (a) Overall width of all culverts shall be equal to the roadway width.
- (b) Construction of new culverts:

The new culverts at the following locations shall be constructed:

| SI | | Existing Chainage (km) | Type of Culverts | Size of Box Culvert |
|----|----|---------------------------|------------------|---------------------|
| (i |) | 383.950 | Box | 2x2 M |
| (i | i) | 385.660 | Box | 2x2 M |

2.5 Junction Improvement:

2.5.1 Major Junction: The following Major junction shall be improved as per relevant IRC Manuals & Ministry's standards and specifications:

| S.no | Existing Chainage (Km) | Туре | Road Classification | Remarks |
|------|------------------------|------|---------------------|--------------|
| 1 | 379.800 | Υ | SH-02 | L/s Varanasi |
| 2 | 385.000 | Т | MDR | R/s Darima |

2.5.2 Minor Junction: The following Minor junction shall be improved as per relevant IRC Manuals & Ministry's standards and specifications:

| S.no | Design Chainage (Km) | Туре | Road Classification | Remarks |
|------|-------------------------|------|---------------------|---------|
| 1 | 375.800 | Т | Station road | |
| 2 | 376.300 | Т | Street road | |
| 3 | 376.550 | + | VR | |
| 4 | 377.200 | Т | Street road | |
| 5 | 377.550 | Т | VR | |
| 6 | 377.950 | Т | City road | |
| 7 | 378.200 | Т | City road | |
| 8 | 379.200 | Т | City road | |
| 9 | 380.950 | + | City road | |
| 10 | 384.460 | Т | City road | |
| 11 | 433.900 | Т | VR | |
| 12 | 435.300 | Т | City road | |
| 13 | 435.400 | Т | City road | |
| 14 | 436.400 | Т | City road | |
| 15 | 437.200 | Т | City road | |

2.6 Overhead gantry traffic signs: location and size.

| S. No. | Location | Board Size(LxB) in meter | Number |
|--------|----------|--------------------------|--------|
| (i) | 385.00 | 4.50 x 2.10 | 2 |
| (ii) | 383.550 | 4.50 x 2.10 | 2 |
| (iii) | 380.400 | 4.50 x 2.10 | 2 |
| (iv) | 379.800 | 4.50 x 2.10 | 2 |
| (v) | 375.600 | 15.00x1.50 | 1 |

- 2.7 Providing Road Marking in entire road section as per IRC:35 and traffic calming measures as per IRC:99.
- 2.8 Traffic sign Board and raised pavement marker (Road studs) shall be provided as per IRC:67, IRC:35and IRC:99 and ministry standard & specifications. The following minimum provision has to be provided as per the direction of Authority's Engineer: -

| | | Number |
|-------|--|-----------|
| (i) | 90 cm equilateral triangle | 114 |
| (ii) | 90 cm circular | 53 |
| (iii) | 90 cm high octagon | 19 |
| (iv) | 60 cm x 45 cm rectangular | 16 |
| (v) | Direction and Place Identification signs with size more than 0.9 sqm size board. | 15.12 Sqm |
| (vi) | Raised Pavement Markers (Road Studs) | 2482 |

2.9 Drain work: RCC drain with cover in entire length of 13.92 km on both side as per TCS.

3 Pre-construction Activity:

- 3.1 **Utility Shifting:** State PWD submitted that No Utility shifting is required in subject proposal. In this regard, it is to inform that there would be need of any utility shifting in the subject proposal during construction, if, any; the cost of the same shall be borne by State Government.
- 3.2 Land Acquisition and Forest Clearance: State PWD submitted that Land Acquisition (LA) is not required as overlay with raising in selected stretches are proposed in existing carriageway width within available ROW. In this regard, it is to inform that there would be need of any land acquisition in the subject proposal during construction, if, any; the cost of the same shall be borne by State Government.
- 4. <u>Rates</u>: The estimate is based on rates of SOR, State PWD Chhattisgarh w.e.f. 01.07.2022.
- 5 . <u>Specifications</u>: The nomenclature and clause numbers of the items shall be specified as per MORTH Specifications for Roads and Bridges works (fifth Revision) and all the works shall be executed strictly as per Ministry's specifications/Ministry's circular/guidelines issued from time to time. The project highway shall be executed as per latest IRC: SP:73:2018 expect deviations mentioned in Schedule D of Contract.

6. Cost Estimate & Modifications:

- 6.1 The estimate is based on rates of SOR Chhattisgarh w.e.f. 01.07.2022. CE (NH), of State PWD while forwarding the proposal has satisfied himself about the adequacy and workability of the rates of various items of work and that rates adopted in the estimate are latest and no revision of the rates has occurred till date.
- 6.2 The lead for the carriage of different materials as proposed in the estimate has been allowed for estimate purpose only. However, while calling tenders the sources may not be indicated. The contractor shall be responsible to procure the material conforming to specification of the work. No provision of extra lead during execution of the work shall be allowed.
- 6.3 The State PWD has submitted the cost estimate for the instant work amounting to Rs. 44.82 Cr. The details are as below:

| Sl. | Description | As propos | As modified in RO, Rai | Remarks |
|-----|-------------|-------------|------------------------|---|
| No | 2 cocp c.o | ed by Stat | | |
| | | e PWD (Rs | pa: (130 iii 313133) | |
| | | . in Crores | | |
| | |) | | |
| Α | Civil Work | 35.59 | 35.59 | Centages, agency charges are ta |
| В | GST @ 18% | | | ken as per Ministry's Circular No |
| | of (A) | 6.40 | 6.40 | .RW/NH-33044/ 10/2019-S&R(P |
| С | Sub-Total (| | | &B) dated 07.03.2019 & A-12025 |
| | A+B) | 41.99 | 41.99 | /1/2020- NHIDCL Cell (Pt) dated 10.08.2021 and instructions of IF |
| D | Contingenc | | | D, MoRTH, New Delhi |
| | y @ 1% | 0.36 | 0.36 | D, MORTH, New Dettil |
| Ε | Supervision | | | |
| | Charges @ | | | |
| | 1% of (A) | 0.36 | 0.36 | |
| F | Agency Cha | | | |
| | rges @ 3% o | | | |
| | f (A) | 1.06 | 1.06 | |
| | Maintenanc | | | |
| | e Charges | | | |
| | @ 2.5% of (| | | |
| | A) + GST@1 | | | |
| | 8% | 1.05 | 1.05 | |
| | LA | - | - | |
| | Total (A+B+ | | | |
| | D+E+F+G) | 44.82 | 44.82 | |

7. Contract Documents:

- 7.1 Single stage two-cover bidding is to be adopted as per instructions conveyed vide Model EPC Document approved by the Ministry as per the circular No. RW/NH-37010/4/2010-EAP (Printing) Vol. IV dated 05.03.2019 and other amendment issued till date.
- 7.2 Construction period for this work shall not be more than 12 months including the rainy period. Defects liability period and maintenance period shall be 5 years as specified in the Model EPC Document issued vide Ministry's letter no. RW/NH-37010/4/2010-EAP (Printing) Vol. IV dated 05.03.2019.

8. Invitation of tenders and award of works:

- 8.1 E-Procurement must be adhered to while inviting the tender and Ministry's CPPP portal shall be used for procurement of Highway contract in accordance with Ministry's guidelines issued vide letter RW/NH-35014/34/2017-H (Part-II) dated 19.06.2018.
- 8.2 The tender notice for invitation of tenders shall be done as per modified guidelines circulated to State PWDs vide Ministry's letter No. RW-NH-34066/14/2018-S&R (P&B) dated 25.06.2018. Further, as regards authority for invitation of tender and evaluation of tenders, Ministry's circular No. RW/NH-24035/4/2008-P&M/PIC Vol-II dated 23.02.2018 shall be followed and its amendments time to time.
- 8.3 The State PWD must ensure that the tenders are not accepted above 5% of the sanctioned amount of the civil work. In this regard, it is clarified that the sanctioned amount for this purpose will be considered as the sanctioned amount of the component of work put to tender. In case, the cost of the work exceeds 5% of the sanctioned cost, revised sanction of the Ministry should be obtained. In this connection, Ministry's letter No. NH-11026/2/99-US (D.I) dated 29th October, 2001 and Ministry's circular no.RW/NH-24035/4/2008-P&M/PIC Vol-II dated 23.02.2018 and its amendments time to time may be referred.
- 8.4 Ministry's EPC document and related guidelines/documents issued from time to time must be followed for the instant work.
- 8.5 All the relevant Circulars and amendments regarding tender procedures issued from time to time by Ministry shall be followed. While finalizing the tender Central Vigilance Commission (CVC) guidelines circulated vide Circular No. Circular No. 4/3/07 dated 03.03.2007 and its amendments should be strictly followed.
- 8.6 The work is to be awarded as per Ministry's circular No.RW/NH-24035/4/2008-P&M/PIC Vol-II dated 23.02.2018 and its amendments time to time.
- 8.7 State PWD will intimate this Ministry and the R.O. Raipur about award of contract/commencement of work immediately as per instructions contained in the Ministry's letter No. RW/NH-11028/1/93-(DO-I) dated 01.12.1993.
- 8.8 The work is to be awarded within 6 months from the date of issue of sanction. In this connection, the Ministry's circular No. RW/NH-24035/4/2008-P&M/PIC vol.II dated 23.02.2018 and its amendments time to time is to be referred. If the work is not awarded within the stipulated time, it may lead to de-sanction of the work unless Ministry's prior approval to extension of the time limit is obtained. The State PWD shall make all efforts to award the work as per contract within the current financial year. Bid shall not be invited once the validity of the sanction is lapsed.

9. Quality Control: -

- 9.1 Adequate tests shall be done by State PWD as per Ministry's specification and the quality of work done in the past as well as in specification and the quality work done in the past as well as in present/future may be ensured by State PWD. If there are instances of premature failures, necessary action should be taken by State PWD for identifying the reasons for these failures and may fix the responsibilities for such lapses.
- 9.2 The work is to be carried out in accordance with the "Manual for Quality Control for Construction of Road & Bridge works- IRC: SP: 112-2017", observing strict

quality control instruction contained in Ministry's letter No. NHIII/P/1/83 dated 19th April, 1984 and permanent records maintained thereof. State PWD shall esure strict quality control during actual execution of work and shall ensure that suitable instruction are issued to all Filed Officers in this regard.

- 9.3 The work of road items should not continue over the bridges, if any. The longitudinal profile of the immediate approaches should be Suitably adjusted to merge with the road level of the bridge as per the guidelines circulated vide Ministry's letter no. RW/NH-330044/10/2000-S&R dated 1st June 2000.
- 9.4 State PWD shall take all necessary testing done for quality control of the work from NABL accredited laboratories as per IRC: SP:112-2017, charging the cost of the same as per Ministry's extant guidelines.
- 9.5 "State PWD shall take all necessary precautions regarding independent quality checks, with adequate quantities, while granting source approval of all building materials. Generally, not more than three (3) sources should be approved for each material type unless otherwise approved by the CE (NH).

10. General Comments:

- 10.1 The provisions of the contingencies may be utilized as per Ministry's guidelines issued vide letter no.RW/NH-24035/4/2008-P&M/PIC Vol-II dated 23.02.2018 and its amended time to time. The estimates for carrying out activities under the provision of contingencies shall be approved by the RO/Ministry.
- 10.2 Collection of material on the roadside should be so planned that it should commensurate with the physical progress of work and the collected material should not cause any hindrance to the traffic. It must be ensured that the contractor arranges for separate land for storage of road construction material and machinery and these shall not be allowed to be stacked on roadside.
- 10.3 No work beyond the scope of the sanctioned estimate leading either to increase in the scope of work or change in specifications should be undertaken without obtaining prior written approval of the Ministry. In this connection, this Ministry's letter No. RW/NHIII/Coord/32/84 dated 19.05.84 and RW/NH-33044/10/2002/S&R (R) dated 09.09.2002 may be referred.
- 10.4 In order to ensure that there is no slippage in achieving the targets, the progress may be closely monitored by the State PWD and quarterly progress report may be furnished to the Ministry in the prescribed format.
- 10.5 During the course of execution, the traffic should be managed as per section 112 of Ministry's Specifications for Road and Bridge works, 5th Revision, 2013 and in accordance with IRC: SP:55 "guidelines on safety in construction zone". Contractor shall provide traffic diversion, road signage, bollards, boards, gunny bags, sheets etc. for safety of traffic during construction period, which will be incidental to work.
- 10.6 Latest Guidelines for Road Safety circulated by Ministry shall be followed wherever applicable.
- 10.7 No splitting of work is allowed.

RW/NH-12014/03/2024/CG-ZoneWest

11. <u>Phasing of expenditure:</u>
Following physical and financial targets shall be strictly adhered to subject to the availability of funds:

| | | Cumulative progress | | | | |
|-------------|----------|---------------------|---|-----------------------|--|--|
| | | | Financial (Rs. In cr.) | | | |
| Year | Physical | Construction | Maintenance (0.00 % for first, 0.5% for second, third and fourth years, 1.00% for fifth year; total 2.50% after completion) | Total (Rs. In cr.) | | |
| 2025- 26 | 10% | 4.37 | 0.00 | 4.37 | | |
| 2026- 27 | 100% | 43.77 | 0.00 | 43.77 | | |
| 2027- 32 | 100% | 43.77 | 1.05 | 44.82 | | |

(Anuj Jain) **Executive Engineer** For DG(RD) & SS

Digitally signed by Anuj Jain

Date: 15-10-2025

15:19:37