सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार

राष्ट्रीय राजमार्ग एवं अवसंरचना विकास निगम लिमिटेड

प्रथम तल, टावर ए, वर्ल्ड ट्रेड सेंटर, नौरोजी नगर, नई दिल्ली–110029,

National Highways & Infrastructure Development Corporation Limited Ministry of Road Transport & Highways, Government of India First Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi-110029, Tel: +91 11 26768950, www.nhidcl.com

(भारत सरकार का उद्यम)

(A Government of India Enterprise)

DATE OF ADVERTISEMENT:- 15.07.2025

BHARATMALA

ROAD TO PROSPERITY

NOTICE INVITING APPLICATIONS FOR EMPANELMENT AS SPECIAL PROJECT MONITOR (SPM)

The National Highways & Infrastructure Development Corporation Ltd (NHIDCL) has been mandated for development and maintenance of the National Highways, Bridges, Tunnels and other Infrastructure works like construction of buildings, Multi Modal Logistics Park, Multi Level car parking. NHIDCL has been getting third party checks/inspection of works done at regular intervals for effective monitoring and implementation of projects, through Special Project Monitor (SPM). SPM are empanelled from among retired officers of the rank of Superintending Engineer (SE) & above for e.g. Chief Engineer (CE), Engineer-in-Chief (E-in-C), Additional Director General (ADG), Director General (DG). For this purpose, advertisements for empanelment as Special Project Monitors (SPM) are published from time to time. The empanelled members are assigned various tasks related to NHIDCL projects from time to time as and when required.

The SPM shall be qualified civil engineers with experience in the field of supervision of construction of roads, bridges, tunnels & other Infrastructure works as mentioned above. The individuals shall have knowledge of relevant Specifications of IRC codes and standards, BIS or other international standards for Road, Bridge, tunnel and other infrastructure works. The individuals should also have knowledge of specification & standards followed by Ministry of Road Transport & Highways, Central Public Works Department etc related to infrastructure projects.

The detailed Eligibility Criteria for SPM is as under.

- i. Degree in Civil Engineering.
- ii. The person should have retired from the atleast post of Superintending Engineer (SE) having 5 years or more experience or equivalent (CGM, ED) and above from MoRTH (CES Roads), CPWD (CES), NHAI, NHIDCL, MES, BRO, State PWD / RCD, IA(Corps of Engineer) etc. Persons due for retirement in next 3 months i.e. till 31.10.2025 can also apply.

For those candidates, who are not qualifying minimum 5 years work experience at the post of Superintending Engineer or equivalent, for claiming the qualifying years for 5 years by showing experience gained after retirement by working in MoRTH, State PWD, NHAI, NHIDCL or any Govt. organization on the post of SE or equivalent & above, Experience certificate along with last salary slip shall be provided during submission of application. Private sector experience will not be considered.



- iii. The person should have experience in execution/planning/monitoring of infrastructure projects in India and/or abroad.
- iv. The maximum age for SPM is 70 years. The applicant should not have attained the age of 68 years on the last date of application. The SPM shall be empanelled initially for a period of 2 years.
- v. He/she shall have unblemished record.
- vi. Persons blacklisted by MoRTH, State PWDs, NHAI, NHIDCL or any other Government organization shall be deemed to be disqualified.

Last date for submission of Application: **14.08.2025** For detailed Terms and Conditions please visit-<u>www.nhidcl.com</u>.

The dully filled application form may be submitted through post or email on before **14.08.2025** on the following address & email.

GM (SPQ Division) NHIDCL HQ, New Delhi First Floor Tower -A, World Trade Centre, Nauroji Nagar New Delhi-110029

> Contact No: - 011-26768900 Email: spm.hq@nhidcl.com

NOTE 1: Any change or amendment to this Circular will be posted on the NHIDCL Website only.

NOTE 2: Incomplete applications or those received after the prescribed date shall be summarily rejected.

NOTE 3: Persons who had earlier empanelled by NHIDCL vide dated 22.01.2024 & 04.04.2025 whose empanelment is expiring on 21.01.2026 & 16.03.2027 has no need to submit fresh applications.

TERMS OF REFERENCE FOR EMPANELMENT OF SPECIAL PROJECT MONITORS (SPM)

1. INTRODUCTION:

The National Highways & Infrastructure Development Corporation Ltd (NHIDCL) has been mandated for development and maintenance of the National Highways, Bridges, Tunnels and other Infrastructure works like construction of buildings, Multi Modal Logistics Park, Multi Level car parking. NHIDCL has been getting third party checks/inspection of works done at regular intervals for effective monitoring and implementation of projects, through Special Project Monitor (SPM). SPM are empanelled from among retired officers of the rank of Superintending Engineer (SE) & above for e.g. Chief Engineer (CE), Engineer-in-Chief (E-in-C), Additional Director General (ADG), Director General (DG). For this purpose, advertisements for empanelled members are assigned various tasks related to NHIDCL projects from time to time as and when required.

NHIDCL at times faces issues relating to delay in completion, inadequate provisions in the project & poor performance of the contractors or Consultants. In order to avoid such issues, it is found prudent to have monitoring of the projects through independent monitors. NHIDCL has accordingly, decided to empanel Special Project Monitors (SPM).

For this purpose, a panel of the Special Project Monitors (SPM) shall be prepared and empanelled members shall be assigned various tasks related to the identified project(s) to be assigned to them.

2. ELIGIBILITY CRITERIA FOR SPECIAL PROJECT MONITORS:

The SPM shall be qualified civil engineers with experience in the field of supervision of construction of roads, bridges, tunnels & other Infrastructure works as mentioned above. The individuals shall have knowledge of relevant Specifications of IRC codes and standards, BIS or other international standards for Road, Bridge, tunnel and other infrastructure works. The individuals should also have knowledge of specification & standards followed by Ministry of Road Transport & Highways, Central Public Works Department etc related to infrastructure projects.

The detailed Eligibility Criteria for SPM is as under:

- i. Degree in Civil Engineering.
- ii. The person should have retired from the atleast post of Superintending Engineer (SE) having 5 years or more experience or equivalent (CGM, ED) and above from MoRTH (CES Roads), CPWD (CES), NHAI, NHIDCL, MES, BRO, State PWD / RCD, IA(Corps of Engineer) etc. Persons due for retirement in next 3 months i.e. till 31.10.2025 can also apply.

For those candidates, who are not qualifying minimum 5 years work experience at the post of Superintending Engineer or equivalent, for claiming the qualifying years for 5



years by showing experience gained after retirement by working in MoRTH, State PWD, NHAI, NHIDCL or any Govt. organization on the post of SE or equivalent & above, Experience certificate along with last salary slip shall be provided during submission of application. Private sector experience will not be considered.

The person should have experience in execution/planning/monitoring of infrastructure projects in India and/or abroad.

The maximum age for SPM is 70 years. The applicant should not have attained the age of 68 years on the last date of application. The SPM shall be empanelled initially for a period of 2 years.

- iv. He/she shall have unblemished record.
 - v. Persons blacklisted by MoRTH, State PWDs, NHAI, NHIDCL or any other Government organization shall be deemed to be disqualified.

The SPM will be required to furnish their CVs including documentary proof of age, qualification and experience, their written consent and availability in the prescribed format at **Annexure-I** along with an affidavit as per Annexure-II, Medical Certificate Annexure-III.

The empanelment of Special Project Monitors shall be following "Search cum Selection Method" by a committee constituted by competent authority of NHIDCL.

3. SCOPE OF WORK

The SPM Shall be required to examine any or all of the following aspects, for one or more projects on "As and when Required" basis, which shall be mentioned in the letter to proceed and submit a report after the site inspection to HQ, NHIDCL with a copy to ED (T&P) and DGM (Coordination), NHIDCL of the concerned project

- i. Assessment of Quality of works and services provided by the Contractor and Authority Engineer.
- ii. Identification of bottlenecks in the ongoing project and suggest measures for timely completion.
- iii. Preparing a list of work activities to be crashed to mitigate delays and the additional resources to be mobilized for crashing the activities.
- iv. Reviewing the performance of "new materials" and "Innovative technologies "and making specific comments about the adequacy of the framework for monitoring performance with recommendations for improvement, if any.
- v. Preparing a list of non-conforming works, holding coordination meeting with Contractor, Project Manager, Supervision Consultant / Authority's Engineer, to discuss and arrive at an agreed list of non-conforming works, formulate remedial measures and work out timelines. The report should contain the record of discussions and specific recommendations of the SPM.



- vi. Reviewing the Office Set up of Authority's Engineer including the competence of Technical Personnel Deployed.
- vii. Identifying best practices and documenting them clearly in a separate section in the report.
- viii. Identification of system flaws in the quality assurance process and ways to improve them.
- ix. Inquiry into the complaints/ allegations, specifically entrusted by the Authority, related to work, services or any other matter pertaining to Contractor, Authority's Engineer (AE) or any related party.
- x. Checking of slope protection measures, if any considered in the project and adequacy w.r.t the actual requirement at site.
- xi. Suggest measures to improve road safety by identification of accident spots and faults due to geometric design along the National Highways and suggest their remedial measures.
- xii. Checking of the DPR prepared by the DPR consultant with respect to the provision taken and their adequacy at the site.
- xiii. Inadequacies, if any in the technical provisions made for the project.
- xiv. Any other special task assigned by Competent Authority of NHIDCL from time to time.

4. IMPLEMENTATION ARRANGEMENTS:

The SPM once assigned the project(s) shall be required to undertake inspection of the assigned project(s). The SPM will be assisted in his independent evaluation of the project by the concerned officers of NHIDCL. The tests for quality control, if desired by SPM, shall be carried out in either of the following:

- i. Field laboratories established by the contractor.
- ii. For specific tests: Testing to be done in District/ Regional/ State level laboratories of the employer/ NABL accredited labs/ Government Engineering Colleges.

NHIDCL shall provide full support in performing task assigned to SPM, including support in taking samples, transportation of samples to the laboratory and testing in presence of representative of implementing authority. NHIDCL shall also bear all associate expenses. The Special Project Monitor (SPM) shall have complete access to the documents pertaining to the project and for this purpose he shall be assisted in his independent evaluation by concerned GM (P) / DGM (P) of NHIDCL.



5. REPORTING:

The SPM is expected to submit his report for necessary action of NHIDCL. The report shall cover status/action on any or all the (i) to (xiv) aspects described in Para 3 above. The report is to be submitted within10 days of completion of visit. A sample format for "Observation Note" is attached at Appendix 1 to V.

6. FACILITIES:

SPM inter alia, shall make his own arrangement for travel, accommodation, transportation etc. The expenditure incurred on travel and accommodation will be reimbursed as per the guidelines mentioned in the financial aspect, below. The SPM shall not avail of any hospitality or services from the Contractor or AE, save and except specifically, permitted by NHIDCL. **Transport from nearest Airport/station to project site and back shall be provided and paid for by the concerned PMU of NHIDCL, for which no traveling expenses shall be payable to the SPM.**

7. NUMBER OF INSPECTIONS :

SPM shall be required to inspect three to four works in a quarter and maximum number of days of site visit shall not exceed 15 days per quarter. Further, SPM shall inspect one project only once and second inspection shall not be carried out without prior clearance from NHIDCL. If, inadvertently the SPM is detailed for a project he has inspected earlier, he shall forthwith bring this to the notice of the detailing authority.

8. FINANCIAL ASPECTS:

The SPM shall submit bills to the concerned RO of NHIDCL along with the report, who shall release the payment out of the contingency of the project.

Sr.	Particulars	Amount
No.		
a)	Per day Fee during site inspection	Rs. 15,000/- (Honorarium)
(b)	Lodging & Boarding charges per day	Lodging
		Rs.7,500/- (metro cities) exclusive GST
		Rs. 5,000/- (other cities) exclusive GST
		The aforesaid amount shall be paid on
		production of Hotel bills. Otherwise, Rs. 1000/-
		per day shall be paid as Lodging charges.
		Fooding / Boarding / DA (in addition to
		Lodging)



		Rs.,2000/- per day. (DA)
(c)	Traveling Expenses	i. Economy class air fare/first class AC railway fare.
		 ii. If the Travel from residence to project site & back is by road then the fare payable will be Rs. 20 per Km
		Note- The tickets is to be purchased from the website of the Airline or Balmer Lawrie and Company, Ashok Tours and Travels or IRCTC. A copy of the ticket indicating the amount paid along with boarding pass is required to be submitted along with TA Bill.
(d)	Travel by AC Taxi / by own car from residence to Airport /nearest station for performance of assignment and from Airport / Nearest Station to residence on completion of assignment.	Rs. 20/- Per Km (Idle travel of own car after drop / for pickup is not payable).
(e)	DA during journey period	Rs. 2,000/- (DA) per day
(f)	Miscellaneous	No additional fee shall be payable for Secretarial assistance/work for preparing the report, nor any honorarium is payable for the days taken to write the report after site visit.

9. EVALUATION OF PERFORMANCE:

Periodic feedback of the performance of SPM shall be pursued by NHIDCL. The Reports / Performance of the SPM shall be periodically reviewed by NHIDCL. In case of unsatisfactory performance / actions prejudicial to fair and transparent conduct or violation of terms of engagement, NHIDCL may consider debarment / blacklisting of the SPM.

(Ralceme S) GM (SPQ Division), NHIDCL, HQ

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Annexure -I

(For	Format of Curr Empanelment as	iculum Vitae (CV Special Project N			
			2	Affix recent pł	notograph
A.	Personal Details				
1.	Name				
2.	Date of Birth (dd/n	nm/yyyy)		-	
3.	Correspondence [Details			
	Address				
4.	Mobile Number				
5.	Alternate Contact	Number		-	
6.	E-mail Address				
7.	Organisation from	which retired			
8.	Post from which re	tired			
9.	Date of Retiremen	t			
10.	Membership of Pro	ofessional Bodies			
B. Qı	alification (Gradua	ation and above)			e.
~ "A]	Sr.No.	Year of Passing	Degree/ Qualifica	Institution/ University	Discipline
1.	· .				÷
2.					
3.					
Othe	er Training, if any	- -			

C. Er	C. Employment Details of 20 Years Prior to Date of Retirement						
			Durati	on		Brief	
SL	Employer/	Post/Designation	·····		Location/place	Description	of
	Organization		From	То	of posting	Duties a	and
	2	÷				Responsibilit	ies
1.							
2.							_
3.							

D. Work Experience After Retirement Date

			Durati	on	Location/	Brief	Description	of
S.No	Employer/ Organization	Post/ Designation	From		place	Duties	nsibilities	and
	erganization	Debignation				rtespor	ISIDIIIties	
1.								
2.								
3.					-			

DECLARATION

I hereby declare that:

- 1. The information furnished above is correct.
- 2. The undersigned has not been debarred/blacklisted by any Government (Centre/State)/PSU or any other Organization.
- 3. It is also certified that at the time of superannuation, no disciplinary proceedings and/or vigilance cases and/or criminal cases were pending nor have they been initiated against me after retirement superannuation.

I, the undersigned, certify that to the best of my knowledge and belief, this Bio-Data furnished by me correctly describes my educational qualifications, my experiences and about myself. I understand that

any willful misstatement described herein may lead to my disqualification or dismissal, if empanelled as SPM by NHIDCL.

Signature of the Candidate (Name of the Candidate) Date:

Guidelines for Furnishing Information in the Format of CV

- 1. Information should be filled in capital letters.
- All the testimonials enclosed (documentary proof regarding age, qualification, experience and Pension payment Order (PPO), Medical Fitness Certificate from Chief Medical Officer of Govt, Last 5 years ACR/APARs during service shall be self-attested. Originals may be required as when sought by authority.
- 3. In item No. B, the details of qualifications for only graduation and above level should be mentioned. The clear mentioning about the discipline and specialization, if any, should be made.
- 4. Under item No. C, the description of duties and responsibilities of every post/organization/duration for the period 20 years prior to retirement, should be furnished in the given format compulsorily.
- 5. Under item No. D, candidates who have retired early/sometime back, the description of duties and responsibilities of all the years after retirement till the date of application for engagement as SPM should be furnished.



Annexure-II

Affidavit

of Mr./Ms_____ (on Rs. 100/- non-judicial paper)

То

Managing Director National Highways & Infrastructure Development Corporation Ltd. (NHIDCL) First Floor Tower -A, World Trade Centre, Nauroji Nagar, New Delhi-110029

Sir/Madam,

I Mr/Ms	S/o / D/o)	aged
years	and	residing
at		
do horoby solomply offirm of	and cincoroly state the following.	

do hereby solemnly affirm and sincerely state the following:

I state that I am currently not associated with any contractor/concessionaire/consultant and willing to render my service as SPM with high ethical standards and integrity.

The above mentioned facts are true and correct to the best of my knowledge and belief.

Signature of the Deponent (Name of the Deponent) Solemnly affirmed at _____ On date

(This affidavit may be given on stamp paper of Rs 100/- duly Notarized to be submitted by last date of submission of application.

Annexure-III

MEDICAL CERTIFICATE OF FITNESS

				• • • • • • • • • • • • • • • • • • •		
I have examin	ned Shr	i / Smt.				Son /
Daughter	of	Shri				
aged		Y	ears	Residence	of	Dist
State		PIN		and certify the	at, he	/ she is free from deafness,
defective visio	n (inclu	ding colo	ur vision) or a	any other infir	mity,	mental or physical, likely to
interfere with t	he effici	ency of h	s / her work a	and found him	/ her	oossessing good health.

This certificate is being given to him /her for the purpose of Joining as ESMEs in NHIDCL.

Signature of Candidate

(To be signed in presence of the Govt Medical Officer)

Signature of Govt Medical Office Name of Govt Medical Officer Registration No. Dated: Seal

<u>Note</u>: Medical certificate granted by a Govt qualified medical practitioner holding at least M.B.B.S. Degree and registered with Medical Council of India, shall only be valid. The date of issue of the medical certificate should be within one month from the date of application.



Appendix- I

CHECKLIST OF INSPECTION OF WORKS

STATE:

DATE OF VISIT:

1. Name of Project / Work:

2. Name of AE:

- 3. Name of Contractor:
- 4. Work in progress at the time of inspection:
 - (i) Physical Progress: ____%
 - (ii)
 - (iii)
 - (iv)

5. I have checked the following for Compliance/Approval:

- (i) Routine Testing Records of each Material is available in the field lab: Yes/No
- (ii) Records of Inspection Check list maintained as per Performa Given In IRC: SP:112-2017 is available: Yes/No

(The detailed comments be attached in a separate sheet for observations in compliance to Manual for Quality Control in Road & Bridge works for procedure confirming to IRC: SP:112-2017)

Check of SPS / IPC / RAR

6. I have checked the quantity of items executed at site with the last IPC/SPS/RAR paid. Details are as under:

S. No.	Item of Work	Unit	Quantity as per SPS/IPC	Quantity found on site	Deficiency	Comments of SPM

Field Inspection / Tests (Items of work checked be modified according to Design)

7. I have done Random Checking of Field Density of the following pavement components at different locations:

a) Subgrade

S. N	D Location/Chainage	Value Obtained	Value as per MoRTH	Comments of SPM
			Specification	
			Not less than 97 %	

Page **1** of **11**

<u>b) GSB</u>

S. No	Location/Chainage	Value Obtained	Value as per MoRTH Specification	Comments of SPM
	a and a second a second se	and the second se	Atleast 98 %	

<u>c) WMM</u>

S. No	Location/Chainage	Value Obtained	Value as per MoRTH Specification	Comments of SPM
			Atleast 98 %	•

DBM

S. No	Location/Chainage	Value Obtained	Value as per MoRTH Specification	Comments of SPM
			equal to or more than 92%	

BC

S. No	Location/Chainage	Value Obtained	Value as per MoRTH Specification	Comments of SPM
			equal to or more than 92%	

8. I have done Random Checking of thickness of following layers of Pavement at different locations as under:

a) Subgrade:

S. No	Location/Chainage	Thickness Obtained	Thickness as per design	Tolerance Limit	Comments of SPM
				± 20 mm	

b) GSB:

S. No	Location/Chainage	Thickness Obtained	Thickness as per	Tolerance Limit	Comments of SPM
			design		-
				$\pm 10 \text{ mm}$	

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<u>c) WMM</u>

S. No	Location/Chainage	Thickness Obtained	Thickness as per design	Tolerance Limit	Comments of SPM
				± 10 mm	

<u>d) DBM</u>

S. No	Location/Chainage	Thickness Obtained	Thickness as per design	Tolerance Limit	Comments of SPM
				$\pm 6 \text{ mm}$	

<u>e) BC</u>

S. No	Location/Chainage	Thickness Obtained	Thickness as per design	Tolerance Limit	Comments of SPM
				 4mm for thickness 40 mm or more 3mm for thickness less than 40mm 	

9. I carried out Core Cutting at two locations at Km _____ and Km _____ (Locations - Chainage) and checked for coarse aggregates and bitumen content are as per MoRTH (5th Revision) Clause 505.2.2 for DBM and Clause 507.2.2 for BC.

a) Dense Bituminous Macadam (DBM)

(i) Results of Coarse aggregate tested in terms of Clause no. 505.2.2 & as per the requirements specified in Table no.: 500-8/Pg. No. 176 of MoRTH specification 5th Revision.

Property	Test	Reference	-		Tolerance	Comments of SPM
		Code	as per MoRTH (5 th	obtained	1	
			Revision)			
Cleanliness (dust)	Grain size analysis	IS:2386 Part I	Max 5% passing 0.075 mm sieve		± 2%	
Particle shape	Combined Flakiness and Elongation Indices	IS:2386 Part I	Max 35%		-	

Page **3** of **11**

C	т	10.0000	Max 35%	-		
Strength	Los	IS:2386		-		
	Angeles	Part IV	Max 27%			
	Abrasion					
	Value or					
	Aggregates					
	Impact					
	Value			 		
Durability	Soundness	IS:2386	Max 12%	-		
	either:	Part V	Max 18%			
	Sodium					
	Sulphate cr				~	
	Magnesium					
	Sulphate					
Water	Water	IS:2386	Max 2%	-		
Absorption	Absorption	Part III				
Stripping	Coating and	IS:6241	Minimum	-		
	Stripping of		retained			
	Bitumen		coating 95 %			
	Aggregates					
	Mix					
Water	Retained	AASHTO	Min 80%	-		
Sensitivity	Tensile	283				
	Strength					-

(ii) Result of Bitumen Content from DBM as per indicated in Table 500-10&11/ Pg. No. 177&178 in terms of Clause 505.3 of MoRTH specification 5th Revision.

S. No	Location/Chainage	Bitumen obtained	Quantity as per JMF	Tolerance Limit	Comments of SPM
				± 0.3%	

(b) Bituminous Concrete (BC)

(i) Results of Coarse aggregate tested in terms of Clause no. 507.2.2 as per requirements specified in Table no. 500-16/Pg. no. 188 of MoRTH specification 5th Revision.

Property	Test	Reference Code	Specification as per MoRTH (5 th Revision)	Result obtained	Tolerance	Comments of SPM
Cleanliness (dust)	Grain size analysis	IS:2386 Part I	Max 5% passing 0.075 mm sieve		± 2%	
Particle shape	Combined Flakiness and Elongation Indices	IS:2386 Part I	Max 35%		-	

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_			1		
	CONTRACT REPORTED FIRM (PER			-	
Angeles	Part IV	Max 24%			
Abrasion					
Value or					
Aggregates	2				
			-		
	IS:2386	Max 12%		_	
	and a second sec	A 14 CONTRACTOR AND A CONTRACTOR AND A CONTRACTOR AND		-	
	1 dit v	WIAX 10/0			
-					
A					
		Max 2%		-	
Coating and	IS:6241	Minimum		-	
Stripping of		retained			
Bitumen		coating 95%			а С
Aggregates		0			
Mix					
Retained	AASGTO	Min 80%			
1					10
	Abrasion Value or Aggregates Impact Value Soundness either: Sodium Sulphate or Magnesium Sulphate Water Absorption Coating and Stripping of Bitumen Aggregates Mix	AngelesPart IVAbrasionValue orAggregatesImpactValueSoundnessIS:2386either:Part VSodiumSulphate orMagnesiumSulphateSulphateIS:2386AbsorptionPart IIICoating andIS:6241Stripping ofBitumenAggregatesMixRetainedAASGTOTensile283	Angeles AbrasionPart IVMax 24%AbrasionMax 24%AbrasionValueValueValueMax 24%Max 12%ImpactMax 12%ValueMax 12%SoundnessIS:2386either:Part VSodiumMax 18%SodiumMax 18%Sulphate orMax 12%MagnesiumMax 18%SulphateMax 12%SulphateMax 18%SulphateCoating andStripping ofIS:6241BitumenMinimumAggregatesCoating 95%MixMin 80%Tensile283	Angeles AbrasionPart IVMax 24%AbrasionMax 24%AbrasionMax 24%ValueMax 12%ImpactMax 12%ValueMax 18%SoundnessIS:2386either: SodiumPart VSoluphate or MagnesiumMax 2%SulphateMax 2%SulphateMax 2%MaterIS:2386AbsorptionPart IIICoating and Stripping of BitumenIS:6241MixMinimum retained coating 95%Aggregates MixMin 80%RetainedAASGTOZ83Min 80%	Angeles AbrasionPart IVMax 24%AbrasionMax 24%Value-Aggregates Impact-Impact-Value-SoundnessIS:2386either: Part VMax 12%Sodium-Sulphate or Magnesium-Sulphate-Sulphate-VaterIS:2386Max 2%-AbsorptionPart IIICoating and Stripping of BitumenIS:6241Mix-Aggregates Mix-Mix-Retained Tensile283AASGTOMin 80%-

(ii) Result of Bitumen Content from BC as per indicated in Table 500-17 in accordance with clause 507.2.5/ pg. No.189 of MoRTH specification 5th Revision.

S. No	Location/Chainage	Bitumen obtained	Quantity as JMF	Tolerance Limit	Comments of SPM
2				± 0.3%	

Lab Inspection / Tests

- 10. I have checked the Records of Calibration of Equipment and found to be up to date Yes/No
- 11. Random Sampling from the Bridge/Culverts and road with of following materials have been carried out and witnessed the following important tests at field Lab of Contractor:
 - (i) Aggregate Test (For concrete works) * (Refer IS:2386-1963)

Test	Result Obtained	Value as per code 383:2016	Comments of SPM
Crushing Test		< 30%	
Abrasion Test		< 30%	
Impact Test		< 30%	
Soundness Test		Sodium	
×		Sulphate < 12%	

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	Magnesium Sulphate < 18%	
Elongation & Flakiness Index	< 40%	
	27.0/	
Sp. Gravity water absorption Test	2.7 % 2% Max	

(ii) <u>Concrete Cube Test</u>

(a) Compressive Strength at 7 days/ 28 days

S.	Dt of	Grade of	Dt of	Cube	Required	Comments of SPM
No	Casting	Concrete	testing	strength	as per	
	_			obtained	code	
					For 7 days	
			2		60 % of	
					specified	
					strength	
					For 28	
					days 100	
				5	% of	
					specified	
					strength	

(iii) <u>Bitumen Test (Refer Section 900: Table 900-4 as per MoRTH specification 5th</u> <u>Revision & IS: 1202 - 1978)</u>

Test	Result Obtained	Value as per IS: 73:2013 code (VG-40)	Comments of SPM
Specific Gravity Test		0.97 to 1.02	
Penetration		Min- 35 mm	
Softening Point Test		Min- 50' C	
Viscosity Test		Max- 4	
Ductility Test		Min -25 cm	
Flash and Fire Point Test		Min- 220' C	u - 6
Purity Check by Solubility Test		Min- 99 %	
Bitumen Extraction Test (Refer: ASTM 2172)		As per JMF	

The test result of above samples have been signed by me in the test report maintained at lab.

- 1. The following brands and grade of cement and steel are being used at site.
 - (a) C<u>ement</u> (i) (ii) (b) <u>Steel</u>
 - (i) (ii)

* Specify the size and use of Aggregate

Signature:

Name:

Date:

REPORT ON SERVICES OF AE

1. I have inspected the office of AE and found Biometric Device is installed and is in working condition.

2. The details of staff are as under:

S. No	Manpower description	Nos to be mobilized as per CA	Nos mobilized at site	Deficiency	Comments of SPM
1	Team Leader				
2	Material Engineer				
				-	

- 3. Comments of SPM on Road geometrics & design submitted by Contractor and reviewed by Authority Engineer.
- 4. Comments of SPM on inspection of works by Authority Engineer.
- 5. Comments of SPM on carrying out of required no of mandatory tests.
- 6. Comments of SPM on AE for properly maintaining records and deficiency, if any.
- 7. Any other Remarks/Observations

Signature: Name:

Date:

<u>REPORT ON RESOURCES MOBILIZED AND SUGGESTIONS FOR MITIGATING DELAYS</u> <u>AND EXPEDITING PROGRESS</u>

S. No.	Type of VEP	Nos Mobilized	Serviceable	Unserviceable	Deficiency	Comments of SPM

- 2. Comments of SPM on bottlenecks in the project and suggested measures for timely completion.
- 3. List of work activities to be crashed to mitigate delays and the additional resources to be mobilized for expediting the progress of works.
- 4. Any other remarks/suggestions.

Signature:

Name:

Date:

SUMMARY OF TECHNICAL DEFICIENCIES OBSERVED IN THE QUALITY OF WORK

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REPORT ON SERVICES OF CONTRACTOR

- (I) Status of Machinery and Manpower including Design Director etc. as per DCA, Article 10, deployed at site by Contractor within 20 days of the appointed date.
- (II) Design, Drawings & Work Program submitted by Contractor to AE within 30 days of the appointed date and same has been approved by AE or not.
- (III) Status of Availability of land, ROW, Utility Shifting and Environmental Clearances.
- (IV) Status of establishment of Site Offices / Camps by Contractor & AE.

