

# National Highways & Infrastructure Development Corporation Limited (A Public Sector Undertaking under the Ministry of Road, Transport & Highways, Govt. of India)

First Floor Tower -A, World Trade Centre, Nauroji Nagar New Delhi-110029

DATE OF ADVERTISEMENT: - 09.12.2024

## 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, Bus ports, water supply work, waste water management etc. There is need for third party checks/inspection of works at regular intervals for effective monitoring and implementation of projects. NHIDCL therefore feels that the services of 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) who have retired from service can be gainfully utilized. For this purpose a panel of Special Project Monitors (SPM) shall be prepared and empanelled members shall be 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 RT&H, CPWD etc related to infrastructure projects. The detail Eligibility Criteria for SPM is as under;

- (i) Degree in Civil Engineering.
- (ii) The person should have retired from the 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, PWD, IA(Corps of Engineer) etc. Persons due for retirement in next 3 months i.e. till 28.02.2025 can also apply.
- (iii) The person should have experience in execution/planning/monitoring of infrastructure projects in India & 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 to a maximum limit of 70 years,
- (v) He shall have unblemished record,
- (vi) Persons blacklisted by MoRTH, State PWDs, NHAI, NHIDCL or any other Government organization shall be deemed to be disqualified.
- (vii) Person should have worked after retirement in MoRTH, State PWD, NHAI, NHIDCL or any Govt. organization on the post of SE or equivalent & above (last salary slip to be provided on submission of application). Private sector experience will not be considered.

Last date for submission of Application: 06.01.2025

For detailed Terms and Conditions please visit-www.nhidcl.com.

The dully filled application form may be submitted through post or email on before **06.01.2025** on the following address & email.

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

Contact No: - 011-26768209 Email: spm.hg@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 19.07.2023 & 22.01.2024 whose empanelment is expiring on 18.07.2025 & 21.01.2026 has no need to submit fresh applications.

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#### 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 and other Infrastructure works like Multi Modal Logistics Park, Multi Level car parking & Bus port etc. There is need for third party checks/involvement in monitoring of projects aforementioned and accordingly, NHIDCL therefore feels that the services of 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) who have retired from Government service can be gainfully availed.

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:

Qualified Civil Engineers with experience in Supervision and Construction works of roads, bridges, tunnels & Infrastructure are proposed to be empanelled. The individuals shall have knowledge of "Specifications for Road and Bridge Works" published by Indian Road Congress on behalf of the Ministry of Road Transport & Highways and other relevant IRC codes and standards and BIS or international standards cited therein. Eligibility criteria for the SPM is as under:

- (i) Degree in Civil Engineering.
- (ii) The person should have retired from the post of Superintending Engineer (SE) or equivalent (CGM, ED) and above from MoRTH (CES), CPWD, NHAI, NHIDCL, MES, BRO, PWD, IA(Corps of Engineer) etc. Persons due for retirement in next 3 months i.e. till 3 months i.e. till 28.02.2025 can also apply.
  - (iii) The person should have experience in execution/planning/monitoring of infrastructure projects in India & 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 to a maximum limit of 70 years.
  - (v) He shall have unblemished record,
  - (vi) Persons blacklisted by MoRTH, State PWDs, NHAI, NHIDCL or any other Government organization shall be deemed to be disqualified.
  - (vii) Person should have worked after retirement in MoRTH, State PWD, NHAI, NHIDCL or any Govt. organization on the post of SE or equivalent & above (last salary slip to be provided on submission of application). Private sector experience will not be considered.

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-III. 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. <u>IMPLEMENTATION ARRANGEMENTS:</u>

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	Rs. 20/- Per Km

		for performance of assignment and from Airport / Nearest Station to residence on completion of assignment.	(Idle travel of own car after drop / for pickup is not payable).
.1	(e)	DA during journey period	Rs. 2,000/- (DA) per day
	(f)	•	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) DGM (SPQ Division), NHIDCL, HQ

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(For F	Fo	rmat of Curriculum V anelment as Special P	itae (CV)	, , ,		
(1 01 , 1	-111100	mement as special i	roject monitor	1	And the first of the second	•
			2 10			
					Affix recent photo	graph
	2"				e e e e e e e e e e e e e e e e e e e	
			~			
Α.	Pe	rsonal Details				
1.	Na	me				
2.	Date of Birth (dd/mm/yyyy)					
3.	Correspondence Details					~
	Ac	ddress				
		K K				
			-			
4.	-	Lilla Mariahan			, , , , , , , , , , , , , , , , , , ,	
	+	bile Number				
5.	Alt	ernate Contact Number	er			
6.	E-r	mail Address		S		y · ·
7.	Org	ganisation from which	retired	ŀ		
8.	Pos	st from which retired				
9.	Date of Retirement					
10.	). Membership of Professional Bodies					
B. Qu	ualifi	ication (Graduation a	nd above)			1
Sr.No	`	Year of			Institution/	
31.140	,.	Passing	Degree/Qualif	lification University Disc		Discipline
1.		*		-		
1.						

2.	,		,
3.			
Other Tr	aining, if any		

C. Employment Details of 20 Years Prior to Date of Retirement							
SL	Employer/	Post/Designatio	Durat			Brief Description of	
JL	Organizatio	n	Fro		c of posting	Duties and	
	n ,	* .	m	0	e or posting	Responsibilitie s	
1.							
2.							
3.				*			
			(10)	.,		*	
4.							

D. Wo	D. Work Experience After Retirement Date						
S.N	Employer/	Post/Designatio	Duration			Brief Description of	
0	Organizatio n	n	Fro m	T o	Location/plac	Duties and Responsibilitie s	
1.						. "	
	,						
2.					*		
3.				i.		,	
4.							

#### **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:

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## Guidelines for Furnishing Information in the Format of CV

- 1. Information should be filled in capital letters.
- 2. 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.

# <u>Affidavit</u>

of Mr./Ms (on Rs. 100/- non-judicial paper)
To Managing Director National Highways & Infrastructure Development Corporation Ltd. (NHIDCL) Floor, PTI Building, 4, Parliament Street New Delhi-110001
Sir/Madam,
I Mr/Ms S/o / D/o) aged years and residing at 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

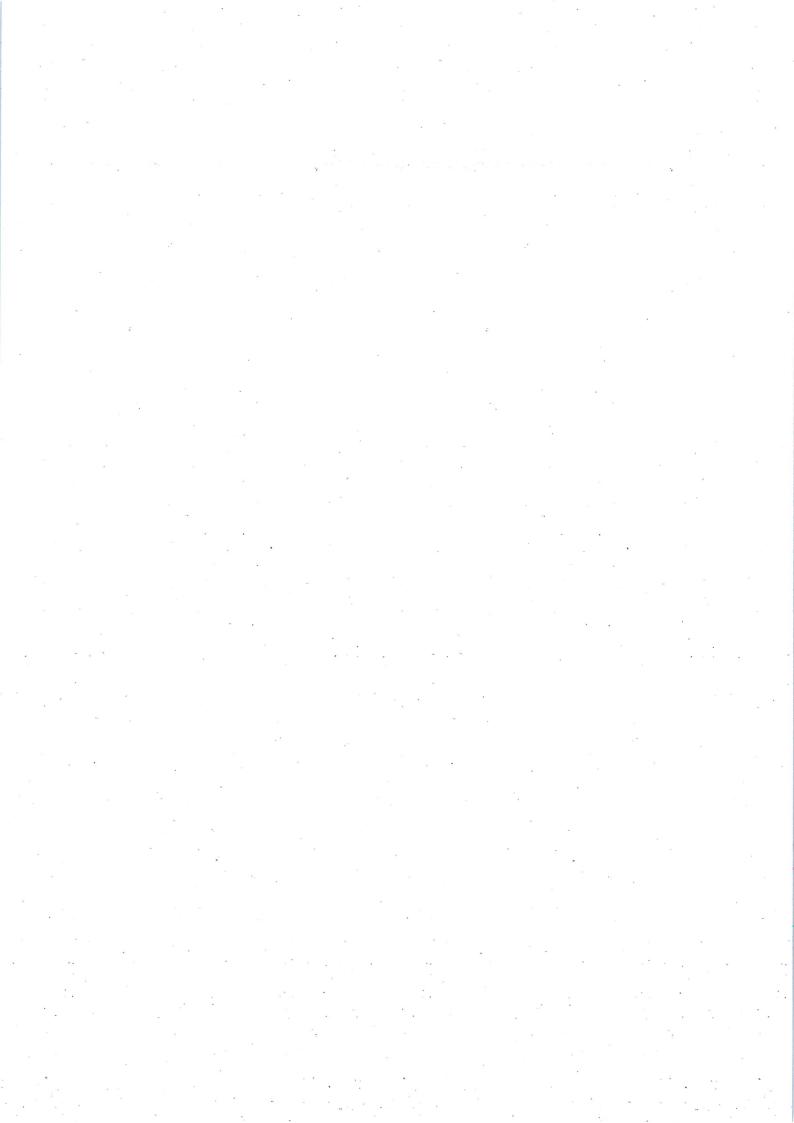
(This affidavit may be given on stamp paper of Rs 100/- duly Notarized to be submitted by last date of submission of application.

#### MEDICAL CERTIFICATE OF FITNESS

I have examined Shri / Smt	Son / Daughter of Shri
	agedYears Residence of
Dist State PIN	and certify that, he / she is free from
deafness, defective vision (including colour	vision) or any other infirmity, mental or physical,
likely to interfere with the efficiency of his	/ her work and found him / her possessing good
health.	
	CALL STATE OF A STATE
This certificate is being given to him /her for	or the purpose of Joining as ESMEs in NHIDCL.
Signature of Candidate	
(To be signed in presence of the Govt Medic	al 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.



# **CHECKLIST OF INSPECTION OF WORKS**

STAT	<u>E:</u>				DATE O	F VISIT:
1.	Name of Project	/ Work:			2	
2.	Name of AE:					
3.	Name of Contrac	tor:			÷	
4.	Work in progress	s at the	time of inspection	:		*
	(i) Physical I					
	(ii)	8				
	(iii)					Ti.
	(iv)					
(i)		Records	of each Material	is available in the		Yes/No
(ii)				ed as per Performa	Given	•
	In IRC: SP:112-2	017 is a	vailable:	le.		Yes/No
×				separate sheet for Bridge works for		
Check	of SPS / IPC / RA	R				
			ity of items execu	ted at site with the	last IPC/SPS/	RAR paid.
	Details are as und			9		*
S. No.	Item of Work	Unit	Quantity as per SPS/IPC	Quantity found on site	Deficiency	Comments of SPM
			1 2 2 2 2 2			SA IVA

# 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. No	Location/Chainage	Value Obtained	Value as per MoRTH	Comments of SPM
	*		Specification	4
· .			Not less than 97 %	

# b) GSB

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

## c) WMM

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

# <u>DBM</u>

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

# <u>BC</u>

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

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 design	Tolerance Limit	Comments of SPM
				± 10 mm	

## c) WMM

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

## d) DBM

S. No	Location/Chainage	Thickness Obtained	Thickness as per design	Tolerance Limit	Comments of SPM
				± 6 mm	*

## e) BC

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 a	and Km	(Locations -Chainage)
	and checked for coarse aggregates and bitumen conten	t 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 5<sup>th</sup> Revision.

Property	Test	Reference Code	Specification	Result obtained	Tolerance	Comments of SPM
	160	Code	as per MoRTH (5 <sup>th</sup>	obtained		
			Revision)		1.	
Cleanliness	Grain size	IS:2386	Max 5%		± 2%	
(dust)	analysis	Part I	passing			,
	*		0.075 mm		-	
	- No 1	-	sieve		160	
Particle	Combined	IS:2386	Max 35%		-	
shape	Flakiness	Part I	*			
	and ·		·			
	Elongation					
	Indices					

Strength	Los	IS:2386	Max 35%		-	
	Angeles	Part IV	Max 27%			
	Abrasion		6			
	Value or					
	Aggregates					
	Impact				24	
	Value	J.*				2
Durability	Soundness	IS:2386	Max 12%		-	
-	either:	Part V	Max 18%			
	Sodium					
	Sulphate or					
	Magnesium	÷ .				-
	Sulphate				2	
Water	Water	IS:2386	Max 2%		-	
Absorption	Absorption	Part III				
Stripping	Coating and	IS:6241	Minimum		-	4.
9	Stripping of	·	retained			
	Bitumen		coating 95 %			
	Aggregates					
	Mix			¥	8	• 20
Water	Retained	AASHTO	Min 80%		-	
Sensitivity	Tensile	283				
	Strength					.9

(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 5<sup>th</sup> 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 <sup>th</sup>	Result obtained	Tolerance	Comments of SPM
			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%		<del>-</del>	

Strength	Los	IS:2386	Max 30%		-	,
	Angeles	Part IV	Max 24%			water of the same
	Abrasion					
	Value or					
	Aggregates					
	Impact		,		3.	
	Value		.*			.'
Durability	Soundness	IS:2386	Max 12%		-	
	either:	Part V	Max 18%		· ·	
·	Sodium			-		
3	Sulphate or					,
	Magnesium	¥				Ÿ
	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	AASGTO	Min 80%		- "	9
Sensitivity	Tensile	283				
	Strength		.,			

(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
				± 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	Value as per	Comments of SPM
		Obtained	code 383:2016	
Crushing Test	8		< 30%	
Abrasion Test	• .		< 30%	
Impact Test			< 30%	
Soundness Test			Sodium Sulphate < 12%	

	Magnesium Sulphate < 18%	era Arriga a rejectiva i a a a a e
Elongation & Flakiness Index	< 40%	
Sp. Gravity water absorption Test	2.7 % 2% Max	

# (ii)

# <u>Concrete Cube Test</u> Compressive Strength at 7 days/ 28 days (a)

S.	Dt of	Grade of	Dt of	Cube	Required	Comments of SPM
No	Casting	Concrete	testing	strength	as per	
				obtained	code	
					For 7 days	
		*,		20	60 % of	÷.
					specified	
					strength	
					For 28	
		,			days 100	
-					% of	
					specified	
		•			strength	**

# Bitumen Test (Refer Section 900: Table 900-4 as per MoRTH specification 5th Revision & IS: 1202 - 1978)

Test	Result Obtained	Value as per IS: 73:2013	Comments of SPM
	,	code (VG-40)	
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	
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 b	rands and grade	of cement and sto	eel are being used	at site.
----	-----------------	-----------------	-------------------	--------------------	----------

- (a) Cement

  - (i) (ii)
- (b) **Steel** 

  - (i) (ii)

Signature:

Name:

Date:

<sup>\*</sup> Specify the size and use of Aggregate

#### 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	Nos mobilized at site	Deficiency	Comments of SPM
i.e.		CA	:		
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

Sign		

Name:

Date:

# REPORT ON RESOURCES MOBILIZED AND SUGGESTIONS FOR MITIGATING DELAYS AND EXPEDITING PROGRESS

1. List of Vehicle, Equipments and Plant (VEP) mobilized at site by the Contractor.

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

## 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.

