

સુધારો – સમાન પત્ર ક્રમાંક તા: ૧૭.૦૯.૨૦૧૬ માં સુધારો

ક્રમાંક: વીઆરઆર-૨૦૧૬-ઉ.સ.૧-૬૩-ડી.૨

ગુજરાત સરકાર
માર્ગ અને મકાન વિભાગ,
૧૪/૩, સરદાર ભવન,
સચિવાલય, ગાંધીનગર.
તા.૧૭/૦૯/૨૦૧૬

પ્રતિ,

સર્વે અધિક્ષક ઈજનેરશ્રીઓ,
માર્ગ અને મકાન (પંચાયત) વિભાગ.

વિષય : સ્પેશીયલ કન્ડીશન મેઈન્ટેનન્સ ગેરેન્ટી કલોઝના અમલીકરણ બાબતે સુધારો.

ચાલુ વર્ષે મુખ્યમંત્રી ગ્રામ સડક યોજનાના કામોમાં સ્પેશીયલ કન્ડીશન મેઈન્ટેનન્સ ગેરેન્ટી કલોઝ લાગુ કરવામાં આવેલ છે. જેના અમલ અંગે નીચે મુજબના સુધારા કરવાના રહે છે.

(૧) ઉપરોક્ત **Special condition** - મેઈન્ટેનન્સ ગેરેન્ટી કલોઝ ફક્ત “મુખ્યમંત્રી ગ્રામ સડક યોજના” હેઠળના નોનપ્લાન નવા રસ્તા (કાચાથી પાકા તથા મેટલથી ડામર), પ્લાન નવા રસ્તા (કાચાથી પાકા તથા મેટલથી ડામર), અ.જી.મા., મુ.જી.મા. વાઈડનીંગના કામોને જ લાગુ પાડવાનું રહેશે.

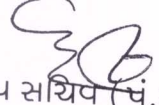
(૨) ઉપરોક્ત મેઈન્ટેનન્સ ગેરેન્ટીના કલોઝ નં.૧ માં નીચે મુજબનો ફેરફાર કરવો.

- હાલ પ્રમાણે : - “.....The amount equivalent to 5% of each bill shall be withheld....” ના બદલે “.....The amount equivalent to 2.5% of each bill shall be withheld....” એમ રાખવું.
- હાલ પ્રમાણે : - “.....For this work shall be recovered from the 5% amount withheld for this purpose” ના બદલે “.....For this work shall be recovered from the 2.5% amount withheld for this purpose” એમ રાખવું.
- મેઈન્ટેનન્સ કલોઝ પેરા -૧ માં ટેબલ (b) બાદ ઉમેરવા માટે: “However maintenance does not include replacement or erection of new signages / stones etc. at the time of yearly maintenance.”

(૩) ઉપરોક્ત કામગીરી સીવાયના રીસરફેસીંગના કામો માટે મૂળ મેઈન્ટેનન્સ ગેરેન્ટી કલોઝ (૩ વર્ષ માટેનું - 17B) તથા તા.૧૨/૦૫/૨૦૧૬ ના પરીપત્ર અનુસાર સુધારેલ ડીફેક્ટ લાયબીલીટી કલોઝ લાગુ પડશે. તથા ઉપરોક્ત Special Condition કલોઝ નો પેરા -૧ લાગુ પડશે નહિ. તે સિવાયના પેરા ૨ થી ૭ લાગુ પડશે. હાલ ઉપયોગમાં લેવાતા કલોઝ ૧૭-બ - મેઈન્ટેનન્સ ગેરેન્ટી કલોઝ માં નીચે મુજબનો સુધારો કરવાનો રહે.

“....Five percent of value of B T Items in each running bill....” ના બદલે
“....(2.5 %) Two and half percent of value of B.T. Items in each running bill....” પ્રમાણે રાખવું.

આ સુધારા તાત્કાલીક અસરથી લાગુ કરવાના રહેશે. તથા હાલમાં અપલોડ કરાયેલ ટેન્ડરોમાં પણ કોરીજેન્ડમ તરીકે અપલોડ કરવાના રહેશે.


ઉપ સચિવ (પં.ર.) ૧,
માર્ગ અને મકાન વિભાગ.

નકલ રવાના પ્રતિ :

- (૧) સર્વે કાર્યપાલક ઈજનેરશ્રીઓ, પંચાયત (મા.મ.) વિભાગ.
- (૨) ઉપસચિવ (પં.ર.) ૧, ૨, ૩

બિડાણ: ઉપરના સુધારા મુજબના કલોઝની નકલ

- (૧) સ્પેશીયલ કન્ડીશન -એ - ફક્ત રીસરફેસના કામો માટે
- (૨) સ્પેશીયલ કન્ડીશન -બી- પ્લાન, નોનપ્લાન, કાચા/મેટલથી ડામર અને વાઈડનીંગના તમામ કામો માટે.

Special Condition of the Contract - B

1 Free maintenance guarantee period

The contractor shall have to give **five years free maintenance guarantee** from the certified date of completion. During this period contractor shall have to repair the damaged portion of the BT surface of road and all other executed items at his risk and cost as per direction of Engineers – in – charge. If BT surface during maintenance period of 5 years is worn-out or damaged then, agency shall have to take remedial action as per table below and as directed by Engineer – in – charge. The cost of annual maintenance for five year shall required to be considered while quoting the tender and has to be born by the contractor. The periodicity of routine maintenance activity shall be as follows.

(a) Maintenance of Bituminous surface road and/or Cement concrete road and/or gravel road and/or WBM road including filling pot holes and patch repairs etc as per clause 1904, 1905, 1906 and 1907 of the Specifications for Rural Roads (First Revision) IRC New Delhi 2014 respectively.

Sr No	Distress and service Level	Remedy	Period to attend for the Contractor
1	Potholes	As per IRC:SP:20-2002 and specifications for rural roads of IRC:2014	7 Days
2	Surface damages/worn out surface in more than 50 meters of lane length in the road stretch	Renewal with wearing coat as originally laid by contractor - as per tender item and specification.	21 Days
3	Patch work area exceeds 30% in per KM length		

(b) Other maintenance works to be carried out:

Sr No	Name of Item/Activity	Frequency of operation in one year
1	Restoration of rain cuts and dressing of berms as per clause 1902 of the Specification for Rural Roads (First Revision) IRC New Delhi 2014.	As and when required
2	Maintenance of earthen shoulders as per clause 1903 of the Specification Rural Roads (First Revision) IRC New Delhi 2014.	As and when required.
3	Maintenance of drains as per clause 1908 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Twice in a year before/after monsoon
4	Maintenance of culverts and causeways including vent clearance as per clause 1909 and 1910 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Twice in a year before/after monsoon
5	Maintenance of road signs as per clause 1911 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Maintenance as and when required. Repainting once in every two years.
6	Maintenance of guard rails and parapet rails as per clause 1912 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Maintenance as and when required. Repainting once in a year.
7	Maintenance of 200 m and Kilo Meter stones as per clause 1913 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Maintenance as and when required Repainting once in a year.
8	White washing guard stones	Once in year
9	Re-fixing displaced guard stones / KM stone / 200 meter stone/Sign board	Once in year
10	Maintenance of road delineators as per Clause 1914 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	As and when required
11	Cutting of branches of trees, shrubs and trimming of grass and weeds etc as per clause 1915 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Twice in a year generally before/after rains or as and when required
12	White washing parapets of CD Works as per Clause 1916 of the Specifications Rural Roads (First Revision) IRC New Delhi 2014.	Once in year

However maintenance does not include replacement or erection of new signages / stones etc. at the time of yearly maintenance.

The amount equivalent to **2.5 % of each bill** shall be withheld and will be released after the free maintenance guarantee period of five year is over.

However this amount shall be released against fix deposit or Bank Guarantee pledged in the name of Executive Engineer after completion certificate of work is issued.

The contractor has to carry out routine maintenance as said above & has to report the Engineer-in-charge in the month of May and November of every year with a copy of the record of contractor's inspection and other instructions received from the Engineer- in-charge and maintenance carried out with colour photograph showing before and after maintenance (@ 3 nos. Of photographs per kilo metre of lane length with date and time digitally incorporated to be submitted by the contractor in 3 sets)

In the event of contractor not carrying out routine maintenance within time limit as specified above, the employer will get the maintenance work carried out through any source and the amount required for this work shall be recovered from **the 2.5% amount withheld for this purpose available with the employer along with additional 20% of this amount as penalty.**

2 The flakiness index and elongation index for coarse aggregate under no circumstances shall exceed the allowable limit set forth in the relevant clause for the material in question.

3 2% of the amount eligible for the payment of bituminous items shall be withheld till the miscellaneous items like earthwork in embankment / cutting for side shoulders, side gutters, kilometre/indicator/guard stones, sign boards etc. are completed in all respect by the contractor. After completion of the miscellaneous items, the above said 2% withheld amount shall be released.

4 **Setting up of adequate laboratory & deployment of Quality Engineer.**

The contractor shall have to set up A laboratory with adequate equipment. Till the setting up of adequate laboratory is completed

& reported of this to the Engineer-in-charge (subject to due verification by the Engineer-in-charge/Engineer's Representative) by contractor in writing, Rs. 2,00,000/- (Two Lakhs) shall be withheld from Contractor's bill(s). A qualified Quality Engineer shall be deployed exclusive for this contract by the contractor. If a qualified Quality Engineer is not deployed by contractor within one month from the date of work order, an amount equivalent to Rs. 15,000 per month shall be recovered till the actual deployment of the Quality Engineer. The amount so recovered towards non-deployment of Quality Engineer shall be non - refunded.

5 Requirement of core cutting machine

The contractor registered in special category – I Road will have to possess two numbers of asphalt core cutting machine and those registered in special category – II Road will have to possess one number of asphalt core cutting machine at the project site in working condition. The contractor shall make available the core cutting machine at his cost for sampling of asphalt cores for testing/as and when demanded by the Authority or the Engineer-in-charge (G.C. No RGN-60-2006-(35)S Dated 26-5-06 of R & B D)

6 Certification of quantity executed

The Contractor shall submit to the Employer regular bills with statements of the value of the work completed for specific billing along with details of measurement of the quantity of works executed in a form as required by the Employer.

Such details of measurements shall be duly certified for each and every executed work item as per Contract BOQ and/or else as ordered by the Employer strictly in accordance with the Contract Specifications. Only the Authorised Signatory of the Contractor shall measure and certify on its own the detailed statements before submitting the same as part of bills to the Employer.

However during regular or any subsequent inspections/audits and/or verification, either by the Employer or the Employer's Representative, if the respective quantities measured are found deficient from the ones measured and certified by the Authorised Signatory of the Contractor in any bills, then the procedure as below has to follow .

As such immediately upon discovery of such deficiency, the Contractor shall be notified by the Employer about respective work item(s) and quantities. The Authorised Signatory of the Contractor shall then assess jointly with the Employer and agree upon such difference in quantity with the Employer within seven days from the date of receipt of such notification.

It is expressly stated and mutually agreed that for such agreed quantity difference, the Employer will have full Contractual right to recover the associated costs at the unit rate of the quoted rate for such work item in BOQ or as in the relevant District Schedule of Rates, published by Roads and Buildings Department, Government of Gujarat prevailing at the time of execution of such work item, whichever is higher, although irrespective of such recovery all other Contract Conditions shall remain as binding and in force for invoking further action as per contract individually and/or collectively.

Such recovery shall be effected by the Employer either from: firstly, any amounts due to the Contractor under the Contract or secondly, from any of the Security Deposits, Retention Money, Bank Guarantee, Performance Securities e.tc of the Contractor immediately.

However, such recovered amount shall be refunded to the contractor if such rectification of work done by the contractor to the satisfaction of Engineer- in- charge as per the provision of contract or shall be adjusted against the amount if work will be done by the Employer for rectification of such work. For such deficient work further action will be taken up as per the provision of contract against the contractor. If the deficient work is not rectified than this amount will be forfeited and further action will be taken up as per the provision of contract.

7 Access to the site.

The contractor shall allow access to the site and to any place where work in connection with the contract is being carried out or it is intended to be carried out to the Engineer-in-charge. And any person/persons/agency authorised by the Employer/Engineer-in-charge.

(B) Maintenance Norms for Bridge / C.D. Works :

APPENDIX -2

SELECTION OF TECHNIQUES AND MATERIALS

Adoption of a particular technique will be governed basically by the end requirements of structural repairs. Choice of materials shall also depend on various factors such as compatibility with the structure, availability of the equipment etc. While tackling structural repairs, several situations may be encountered. Choice of different techniques and materials as given in the table below is after considering such situations. The list given in the table is not exhaustive but only indicative of some commonly adopted techniques and it is possible to use these techniques/materials in combination with other methods.

9 SP:40

Detailed description will be found in earlier chapters. In this, only summary is attempted.

Sr. No.	Type of Material of the Bridge	Component of the Bridge	Type of distress of damage	Suggested Remedial Measures	
				Repairs/Rehabilitation	Strengthening
I	Masonry Bridges	(A) Foundations	Undermining, Scouring	River Training Protection by Sheet Piling	---
			Settlement	---	Modification of the foundation, jacketing etc.

Sr. No.	Type of Material of the Bridge	Component of the Bridge	Type of distress of damage	Suggested Remedial Measures	
				Repairs/Rehabilitation	Strengthening
II	RQC Bridges	(B) Sub-structure	Leaching of mortar in joints surface deterioration	Epoxy mortar painting and injection of epoxy surface protection.	Guniting, Jacketting
		(C) Super-structure	Cracking, loosening of Stones/bricks	Treatment by epoxy resin and mortar	Bonding of steel plates, Guniting
			Leaching of joints, surface deterioration	Protective coating	Adding material to the intrados or extrados in case of Arch Bridges
		(A) Foundation	Deterioration, Structural Damage, Sinking of foundation, Erosion	Protection and replacement of material. River Training by sheet piling, garlanding etc.	Modification of the foundation, jacketting etc.
		(B) Sub-structure	Spalling, Cracking, Disintegration, Sealing, Corrosion of reinforcement	Repair to concrete surface by cement mortar or resin systems. Injection of epoxy, Surface protection, Replacement of reinforcement.	Guniting with treatment to reinforcement and using bonding agent, jacketting.
		(C) Superstructure	Surface deterioration spalling honey combs cracks disintegration, corrosion of reinforcement	Surface preparation by mechanical or chemical means with the use of sand blasting-Demolition of concrete by jack hammers, chisels explosives etc.	Strengthening by external reinforcement such as bars or epoxy bonded plates.

Sr. No.	Type of Material of the Bridge	Component of the Bridge	Type of distress of damage	Suggested Remedial Measures	
				Repairs/Rehabilitation	Strengthening
				Bonding agent such as cement mortar/paste Impregnation with silicon, organic solutions, resins or oils	Strengthening by post-tensioning-Using external prestressing cables suitably anchored at the end of the girder.
				Replacement of concrete section - careful pretreatment of surface and building up the section by resin system or cement mortar with plastic modification.	
				Repair of cracks by proper selection of epoxy polyurethane resins. Acryl resins etc. and with suitable injection equipment.	
				Shotcrete Guniting	
				Protective coating. Removal of Chloride contamination - physical removal of affected concrete (wherever possible) and rebuilding the section	

Sr. No.	Type of Material of the Bridge	Component of the Bridge	Type of distress of damage	Suggested Remedial Measures	
				Repairs/Rehabilitation	Strengthening
III	Prestressing Concrete Bridges	(A) Foundation	Details given under PSC bridges, and as	"RCC Bridges" are also applicable to these components of such not repeated.	
		(B) Substructure	-do-		
		(C) Superstructure	Surface deterioration, Cracking, Spalling, Damage, Corrosion of reinforcement	Repair methods suggested under "RCC Bridges" can be applied here also.	Strengthening by external Cables.
			Corrosion of cables	Cleaning of prestressing cables and re-grouting	Epoxy bonded plates.
			Loss of Prestress	Complicated solution involved.	
IV	Steel Bridges	(A) Foundation	---	---	---
		(B) Sub-structure	Weakening of members	Replacement of weak or defective members	Introduction of extra load carrying elements.
		(C) Superstructure	Decrease in load carrying capacity	Splicing	External prestressing of the beams and similar members.
			Cracking	Introducing new members	

Sr. No.	Type of Material of the Bridge	Component of the bridge	Type of distress of damage	Suggested Remedial Measures	
				Repairs / Rehabilitation	Strengthening
			Corrosion, pitting Fatigue, Loosening of Bolts and rivets etc.	Protective coating, Replacement of bolts and rivets.	Addition of Stiffeners to flanges webs and diaphragms.
			Abnormal deflections, Bucking, working or kinking of element necking, yielding.		
V	Composite Bridges	(A) Foundation (B) Sub-structure (C) Super structure	Details given in I to IV be applicable in pertinent particulars. Not many references are available. Defects in concrete or steel shall be dealt as per manner described under S.No. II to IV.	I to III above shall be applicable in pertinent particulars.	-
VI		Bearing	Manufacture, defective materials, improper installation corrosion, cracked or broken rollers, plates accumulation of dirt / debris at the bearing point, failure of anchorage system.	-	Appropriate corrective action shall be taken after detailed investigation of defect. If required Bearing shall be replaced.

Note :- If any damage is observed / noticed during maintenance period, agency has to repaired as stated above (Sp. 40 : Guide lines on techniques for strengthening & rehabilitation of Bridges).

Special Clause - III

Special Condition For Bituminous Work With Use of Drum Mix Plant And Paver Finisher.

- (i) The Drum mix plant and accessories to be used for the work shall be conformity with the specifications prescribed vide Govt. of India, Minister of Transport Circular No. RN/RMP/1161384 dt. 01/01/87. The plant shall be equipped with all units and accessories as per latest IS 3066/1955 as amended from time to time. The contractors will have to modify their plants suitably within a period of six months from the date of issue of latest specification or codes.
- (ii) The contractor shall invariable get the job mix formula for the mix approved by the Engineer in charge before starting of work.
- (iii) Use of vibratory roller to be compulsory.
For the work like earth work, water bound macadam and bituminous items the compactions shall be done with vibratory roller only. The vibratory roller shall be of standard make and suitable to impart desired degree of compaction. The compaction with the help of static roller shall not be permitted and no clam what so ever shall be entertained on this account. Wherever use of the road roller is mentioned in specification / clause etc. in this documents shall be treated as use of vibratory roller.
- (iv) Amount to be with held till miscellaneous item are completed.
2% of the amount eligible for the payment of bituminous items only shall be with held till the miscellaneous items like earthwork in embankment / cutting for side shoulders, side gutters. After completion of all the miscellaneous items, the above said **2%** with held amount shall be released.

Special Clause - IV

CONSTRUCTION EQUIPMENT :

- 1.1 The methodology and equipment to be used on the project shall be furnished by the contractor to the Engineer well in advance of commencement of work and approval of the Engineer obtained prior to its adoption and use.
- 1.2 The contractor shall give a trial run of the equipment for establishing its capability to achieve the laid down specifications and tolerance to the satisfaction of the Engineer before commencement of work, if so desired by the Engineer.
- 1.3 All equipment provided shall be of present efficiency and shall be operated and maintained at all times in a manner acceptable to the Engineer.
- 1.4 No equipment or : personnel will be removed from site without permission of the Engineer.

Special Clause - V

WORK PROGRAMME AND METHODOLOGY OF CONSTRUCTION :

The contractor shall furnish his programme of construction for execution of the work in within the stipulated time schedule together with methodology of construction of each time of work and obtain the approval of the Engineer prior to actual commencement of work.

Special Clause - VI

ACTION IN CASE OF DISPROPORTIONATE PROGRESS :

In case of extremely poor progress of the work or any item at any stage of work which in the opinion of the, Engineer can not be made good by the contractor considering his available resources, the Engineer will get it accelerated to make up the lost time through any other agency and recover the additional cost incurred, if any, in getting the work done from the contractor after informing him in writing about the action envisaged by him.

Special Clause - VII

SETTING OUT :

Setting out the work as spelt out in clause – 109 of Ministry's Specifications for Road and Bridge work (2nd Revision) will be carried out by the contractor.

Special Clause - VIII

PUBLIC UTILITIES :

Action in respect of public utilities will be taken by the contractor as envisaged in clause 110 of Ministry's Specification for Road and Bridge work (2nd Revision)

Special Clause - IX

ARRANGEMENT FOR TRAFFIC DURING CONSTRUCTION :

Action for arrangement for traffic during construction will be taken by the Contractor as envisaged in the contract documents and spelt out in Clause-112 of Ministry's Specifications for road and Bridge works (2nd Revision).

Special Clause - X

QUALITY CONTROL :

The norms of achieving quality of work will be on the contractor who will take as stipulated in section-900 of Ministry's Specifications for Road and Bridge works. (2nd Revision).

Special Clause - XI

MINISTRY'S SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (2ND REVISION) :

The Ministry's specifications for Road and Bridge works (2nd Revision) will form part of the contract documents and the contractor will be legally bound to the various stipulations made therein unless and otherwise specifically relaxed or waived partly through a special clause in the contract document.

Special Clause - XII

DOCUMENTATION :

The contractor will prepare drawing(s) of the work as constructed and will supply original with three copies to the Engineer who will verify and certify these drawings. Final as constructed drawing(s) shall then be prepared by the contractor and supplied in triplicate along with a micro film of the same to the Engineer for record and reference purpose.

Special Clause - XIII

APPLICABLE IN CASE OF ROAD WORKS ONLY :

The details of the paver, specified in the clause-504.3.5 will be relaxed in the case of Bituminous macadam (Clause-504) where it is going to be covered by any wearing course including 25 mm semi-dense concrete (Clause-519) and other than 40 mm semi-dense Bituminous Concrete (Clause-511)/Bituminous concrete (Clause - 512) or by a base course of Dense Bituminous macadam (Clause-507) with the provision that Bituminous macadam and 25 mm semi-dense Bituminous concrete can be laid by means of self propelled mechanical paver with suitable screeds capable of spreading tamping and finishing the mix true to the specified lines/grades and cross sections. (M.O.S.T. GOI No.RW/NH/33045/1/88-DO. II, Dated 6.4.1990).

1. The use of drum mix plant for mixing bitumen and aggregate is compulsory for this work. Only contractor possessing facility of drum mix plant shall be eligible to bid for this work. The tender copies shall be issued to only those contractors who are possessing drum mix plant.
2. The work shall be executed with the equipment as per MOST specifications (IInd Revision), 1988, where in details of the types of equipment are given for various specification only those bidders who supply necessary proof/document for possession of the required type of equipment in their bids shall be considered as responsible for further evaluation and award of work.

LETTER OF BINDING.

If any Material in special case is Not available as Per Specification then in that case We Will bring in good quality of Materials as per Approved by Department from the Other Sources of Supply and will not claim for any Compensation there off.

Signature of Contractor.

Executive Engineer
Panchayat (R & B) Division
Rajpipla.