

**TENDER DOCUMENT
FOR**

Road Work near Administrative Block (Civil Work)

AT PEC UNIVERSITY SECTOR 12 CHANDIGARH

Last Date of Submission of document: 18-01-2017

Estimated Cost: Rs. 4,15,945/-

Earnest Money: Rs. 8,319/-

Time: 02 Months

INDEX

Name of Work: - Road Work Near Admn. Block (CIVIL WORKS) at PEC UNIVERSITY OF TECHNOLOGY .

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SECTION – I

Check List, CPWD-6 **Project Summary.**

CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF TENDERS

1. TENDER TO BE WITNESSED AT **SHEET NO II- 2** OF TENDER DOCUMENTS.
2. THE TENDER / TENDERS CONTAINING CONDITIONS CONTRARY TO THOSE SPECIFIED IN THIS DOCUMENT SHALL BE SUMMARILY REJECTED.
3. IN SCHEDULE - 'A' APPENDED TO THE TENDER DOCUMENTS, THE RATES MUST BE FILLED BOTH IN WORDS AND FIGURES. THE AMOUNT SHOULD BE WORKED OUT FOR INDIVIDUAL ITEMS AND TOTALLING DONE.
4. THE CONTRACTOR(S) SHALL QUOTE THE RATES KEEPING IN MIND, GENERAL CONDITIONS OF CPWD WORKS-2014 AS AMENDED FROM TIME TO TIME, SPECIAL CONDITIONS AND PARTICULAR SPECIFICATIONS ETC.
5. IT MAY BE NOTED THAT THE 10 CC CLAUSE IS ONLY APPLICABLE IF THE TIME LIMIT OF THE WORK IS MORE THAN 18 MONTHS.
6. CRITERIA FOR ENGAGEMENT OF SPECIALIZED AGENCIES HAVE BEEN LAID AT SHEET **IV 13**, WHICH MAY BE NOTED.
7. THE CONTRACTOR/ AGENCY SHALL QUOTE THE RATE KEEPING IN VIEW THAT THEY HAVE TO GIVE AN UNDERTAKING BEFORE AWARD OF WORK THAT **"THEY WILL INSTALL/ ARRANGE FIELD TESTING INSTRUMENTS, ESSENTIAL T&P AS PER SHEET NO. VI- 8 & 9" or Annexure .**
8. THE CONTRACTOR(S) SHALL QUOTE THE RATE OF TMT REINFORCEMENT BARS KEEPING IN MIND RATES OF PRIMARY PRODUCERS ONLY AND CLAUSE 10CA WILL BE APPLICABLE ACCORDINGLY.

PEC UNIVERSITY OF TECHNOLOGY

E-TENDER NOTICE

The University Engineer PEC University of Technology Chandigarh on behalf of Director PEC University of Technology invites E-Tender from enlisted agencies of Chandigarh Administration, M.C. Chandigarh, CPWD, State PWDs of Haryana/Punjab/Himachal and their board and corporations which shall be uploaded and received on <http://etenders.chd.nic.in>.

Sr. No.	Name of work	Estimated Cost (Rs.)	Earnest Money	Time limit	Date of opening
1	ROAD WORK NEAR ADMN. BLOCK AT PEC UNIVERSITY OF TECHNOLOGY (CIVIL WORKS)	04,15,945/-	Rs. 8,319/-	02 (Two Months)	18.01.17 (3:30 PM)
CONDITIONS :					
1 Non Chandigarh Administration registered contractors shall have to fulfill the criteria of satisfactory execution of works as given below:-					
(i) Three similar works, each of value not less than 40% of the estimated cost put to tender, or					
(ii) Two similar works, each of value not less than 60% of the estimated cost put to tender, or					
(iii) One similar work, of value not less than 80% of the estimated cost all amounts rounded off to a convenient full figure, in the last seven years ending on the last day of the month previous to the one in which the tenders are invited.					
AND					
One work of any nature (either part of above or separate one) costing not less than 40% of estimated cost with some Central/State Government/Central Public Sector Undertaking.					
Similar Works Mean – Civil & Electrical Work					
The value of executed works shall be brought to current costing level of enhancing the actual value of work at simple rate of 7% per annum. Calculated from the date of completion to last date of receipt of tenders.					
The bidder should have average annual financial turnover of Rs.5,00,000 /- on construction works during the last three years ending 31 March 2016(Scanned copy of certificate from CA to be uploaded)					
2. i)	Cover-1	Shall contain Earnest Money, copy of enlistment Certificate of work experience for Non Chandigarh Administration registered contractors.			
ii)	Cover-2	Shall contain Financial Bid on the prescribed form			
3.	Earnest Money in the form of Demand Draft (drawn in favour of Director PEC University of Technology, Chandigarh) shall be scanned and uploaded to the E-Tendering website within the period of bid submission. The physical EMD of the scanned copy of EMD uploaded shall be deposited by the lowest tenderer within a week after opening of financial bid, failing which the tenderer shall be rejected and enlistment of the agency shall be withdrawn by the enlisted authority. Further the following undertaking in this regard shall also be uploaded by the intending bidders:- “The physical EMD shall be deposited by me/us with the UE calling the tender in case i/We become the lowest tenderer within a week of the opening of financial bid otherwise department may reject the tender and also take action to withdraw my/our enlistment.”				
5.	The bidder should furnish the Affidavit that I/we hereby declare that I/we have not been black-listed, debarred/suspended by any Govt./Semi/ Corporation/Pvt. Organization during the last seven years.				
6.	Bids document can be downloaded from the website of Chandigarh Administration www.pec.ac.in or http://etenders.chd.nic.in				
7.	The Bidders shall have to submit their Bids on line in Electronic Format with digital signatures. For participation in e-tendering process the Bidder needs to register themselves on http://etenders.chd.nic.in				
8.	The Bids shall be uploaded in Electronic Format on the website http://etenders.chd.nic.in . Scanned copies of Earnest Money Deposit, copy of affidavit and copy of enlistment shall also be uploaded along with Bid within prescribed time limit.				
9.	The agency has to produce the original document as and when asked for by U.E. The failure of agency to furnish the said original document will entail summarily rejection of its tender.				
10.	Instruction to Bidders regarding e-tendering process : –				
	a.	Tenders without digital signatures will not be accepted by The Electronic Tendering System. No tender will be			

	accepted in physical form and in case it has been submitted in the physical form it shall be rejected summarily.
b.	Before submission of on-line Bids, Bidder must ensure that scanned copies of all the necessary documents have been uploaded with the Bid.
c.	It will be mandatory for all the bidders to upload all the documents mentioned under 'NIT Documents' template under the 'Cover Details'.
d.	The PEC University of Technology will not be responsible for any delay in on-line submission of the Bids due to any reason whatsoever.
e.	Bidder should get ready with the scanned copies of the EMD as specified in the tender document. The original installment in respect of the cost of Bid document, EMD and Hard copies of all the Eligibility Documents as uploaded by the Bidder should be submitted only to the designated Authority and within the stipulated time period.
f.	The details of EMD specified in the Tender documents should be the same as submitted on-line (scanned copies) otherwise tender will be rejected summarily.
11.	All disputes concerning in any way with this work are subject to the Chandigarh jurisdiction only.
12.	For detailed terms and conditions of the DNIT, relevant drawings etc. can also be seen in the office of the undersigned on any working day during office hours.
13.	Corrigendum/Addendum to this tender, if any, will be uploaded on the website mentioned above. This may be noted by the contractor/bidder.
14.	Conditional tenders or if Earnest Money not deposited within a week after opening of financial bid the tender will be rejected without assigning any reason.
15.	Successful tender shall be deposit an amount equal to 5% of the tendered and accepted value of the work as per performance guarantee.
16.	PEC University of Technology reserves the right to reject any or all the application/tenders without assigning any reason. Overall lowest bid will be criteria for finalization of tender.
17.	<p>The tender for the works shall remain open for acceptance for a period of 90 (days) from the opening of technical bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Competent Authority, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said Earnest Money as aforesaid and to forfeit the whole of the Earnest Money if the tenderer fails to submit the Performance Guarantee in the prescribed time after issue of letter of acceptance. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.</p> <p>In the event the tenderer whose tender is accepted and the award letter issued after the receipt of Performance Guarantee in the prescribed form and time, fails to commence the work "along with change in scope, if any" in the prescribed time or abandons work before its completion, the Director PEC University of Technology shall without prejudice to any other right or remedy be at liberty to forfeit the whole of the Earnest Money and Performance Guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Director PEC University of Technology Chandigarh</p>
18.	The recovery of water charges shall be made as per Notification issued by the Secretary Local Govt. Chandigarh Administration vide notification No. 6/1/195-FII(8)2011/4088, dated 24.05.2011 conveyed vide E.E. M.C. P.H. Division No. 2 vide memo no. 1533-62, dated 02.06.2011.
19.	The contractor will ensure the enrollment of children of labourers working at their site of works in nearby school as per instructions of CEUT Chandigarh UO No.W1/2014/4045-46 dt.11.03.2014 received vide SEC-I Chd. Endst. No.W1/2014/1794-96 dt.18.03.2014.
20.	The contractor/agency will ensure that no children is engaged at the site of work.
21.	Agreement shall be drawn with the successful tenderer on prescribed CPWD Form No.8 as per "General conditions of the contract of CPWD works-2012" (which is available as a Govt. of India Publication) and the Amendment/changes in clauses of the General Conditions of the contract for CPWD works-2014 attached in Section- III . Tenderer shall quote his rates as per various terms and conditions of the said form, which will form part of the agreement.
22.	The time allowed for carrying out the work will be 02 Months from the date of start as defined in Schedule 'F' or from the from date of allotment of above work, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
23.	The site for the work is available.
24.	Tender shall be accompanied with Earnest Money Rs. 8,319/- in the shape of Deposit at Call receipt or Demand Draft having validity for 6 months or more issued by a scheduled bank in favour of Director PEC University of Technology
25.	The contractor whose tender is accepted will be required to deposit furnish performance guarantee of an amount equal to 5.00% (Five point Zero Percent) of the tendered amount with in the period specified in schedule F. This guarantee shall be in the form of demand draft of any scheduled bank payable at

	Chandigarh
26.	The description of the work is as follows: -
	Name of Work :- ROAD WORK NEAR ADMN. BLOCK AT PEC UNIVERSITY OF TECHNOLOGY (CIVIL WORKS).
	Copies of other drawings and documents pertaining to the work will be open for inspection by the tenderers at the office of the University Engineer PEC University of Technology
	Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools and plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Director PEC University of Technology and local condition and other factors having a bearing on the execution of the work.
27.	The competent authority on behalf of Director PEC University of Technology does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of any reason. All tenders, in which any of the prescribed conditions are not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.
28.	Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
29.	The competent authority on behalf of Director PEC University of Technology reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
30.	The contractor shall not be permitted to tender for works in the Circle (responsible for award and execution of contracts) in which his near relative is posted in any capacity. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer/official in PEC University of Technology Administration. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Director PEC University of Technology as well as for future works.
30.1	No employee of PEC University of Technology. is allowed to work as a contractor for a period of two years after his retirement from Government service, without the previous permission of the Chandigarh Administration in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the PEC University of Administration. As aforesaid before submission of the tender or engagement in the contractor's services
31	The tender for the works shall remain open for acceptance for a period of ninety days from the opening of financial bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier or makes any modifications in the terms and conditions of the tender which are not acceptable to the Director PEC University of Technology, then the Director PEC University of Technology shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said Earnest Money as aforesaid and to forfeit the whole of the Earnest Money if the tenderer fails to submit the Performance Guarantee in the prescribed time after issue of letter of acceptance. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.
31.1	In the event the tenderer whose tender is accepted and the award letter issued after the receipt of Performance Guarantee MOU signed with requisite associates in the prescribed form and time, fails to commence the work "along with change in scope, if any" in the prescribed time or abandons work before its completion, the Director PEC University of Technology shall without prejudice to any other right or remedy be at liberty to forfeit the whole of the Earnest Money and Performance Guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Director PEC University of Technology
32	This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the accepting authority, shall, within 10 days from the stipulated date of start of the work sign the different component part of the contract consisting of:-
32.1	The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any

	correspondence leading thereto.
33	The Agency has to produce the original documents as and when asked for by E.E. The failure of the Agency to furnish the said original documents will entail summarily rejection of its tender.
34.	The reference of General condition of Contract for CPWD-2014' Wherever appearing in bid document shall be read as General Condition of Contract for CPWD Works-2014'
35.	For any Technical Issue related to Electronic Tendering Portal, Bidders may contact IT Cell, DIT, Additional Deluxe Building 5 th Floor, Sector-9, Chandigarh or email at etender@chd.nic.in , Phone No.0172-2740641,0172-2740003
	For & on behalf of the Director PEC University of Technology Signature.....
	University Engineer PEC University of Technology Chandigarh

SECTION – II
CPWD-6 Form 7, Schedule ‘A’ to ‘E’

PEC UNIVERSITY OF TECHNOLOGY
SECTOR -12 , CHANDIGARH

STATE: UT

Authority : PEC

BRANCH: ESTATE OFFICE ,
UNIVERSITY ENGINEER PEC UNIVERSITY
OF TECHNOLOGY, CHANDIGARH

ZONE : CHANDIGARH

ITEM RATE TENDER & CONTRACT FOR WORKS

Tender for the work of : ROAD WORK NEAR ADMN. BLOCK AT PEC UNIVERSITY OF
TECHNOLOGY (CIVIL WORKS).

(A)

to be submitted by **3.00 p.m.** on 18.01.17 to Registrar PEC University of Technology
Sector 12 Chandigarh

to be opened in presence of tenderers who may be present at **3.30 p.m.** on 18.01.17 in the
office of Registrar, PEC University of Technology Sector 12 , Chandigarh.

i)

Issued to:-

Signature of officer issuing the documents.....

Designation:- Registrar, PEC University of Technology Sector 12 , Chandigarh.

ii)

iii) Date of issue:-

TENDERER

I/We have read and examined the Notice Inviting Tender, Schedule A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special Conditions, Schedule of Rate and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F', viz. Schedule of Quantities and in accordance in all respects with the Specifications, Designs, Drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of Contract and with such materials as are provided for, by and in respects in accordance with, such conditions so far as applicable.

CPWD FORM NO. 7

We agree to keep the tender open for (90) Ninety days from the date of opening of tender/ ninety days from date of opening of financial bid and not to make any modifications in its terms and conditions.

A sum of Rs. **8,319/-** is hereby forwarded has been deposited in Demand Draft of a any Scheduled Bank payable at Chandigarh and **(5% of the tender amount)** in Guarantee Bond of Scheduled Bank or State Bank of India as Earnest Money. If I/we fail to furnish the prescribed Performance Guarantee within prescribed period, I/we agree that the said President of India or his successor in office shall without prejudice to any other right or remedy be at liberty to forfeit the said Earnest Money absolutely. Further, if I/we fail to commence the work as specified. I/we agree that President of India or his successors in office shall, without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the Performance Guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2, 12.3 and 12.5 of the tender form. **Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.**

I/We hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as Secret / Confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/we am/are may authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated

Signature of Contractor

Witness: -

Postal Address: -

Address: -

Occupation: -

Telephone No.

Fax:-

E-Mail:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs.....
(Rupees.....)

The letters referred to below shall form part of
this contract agreement.

For & on behalf of the Director PEC
University of Technology.

- i)
- ii)
- iii)
- iv)

Signature

University Engineer
(PEC University of Technology)

- | | | |
|-------------------------------|---|--------------|
| 1. Special Conditions | - | Section – IV |
| 2. Particular Specifications. | - | Section – V |
| 3. Annexure | - | Section – VI |

SCHEDULE ‘A’

Schedule of quantities

In case of composite tender

- As per **Section – VII**

Description of item	Quantity			
	Civil Work	P.H. Work	Electrical work	Total
a) DSR Items				
b) N.S. Items	4,15,945/-			4,15.945/-

SCHEDULE ‘B’

Schedule of materials to be issued to the contractor.

S.No.	Description of item.	Quantity.	Rate in figures & words at which the material will be charged to the contractor	Place of issue
(1)	(2)	(3)	(4)	(5)
Nil				

SCHEDULE ‘C’

Tools and plants to be hired to the contractor

S.NO.	DESCRIPTION.	HIRE CHARGES PER DAY	PLACE OF ISSUE
- NIL -			

SCHEDULE ‘D’

Extra schedule for specific requirements/ documents for the work, if any.

- | | | | |
|----|---|---|---------------|
| 4. | Amendments/ Changes in Clauses
of the General Conditions of Contract
to CPWD Works - 2014 | - | Section – III |
| 5. | Special Conditions | - | Section – IV |
| 6. | Particular Specifications. | - | Section – V |
| 7. | Annexure | - | Section – VI |
| 8. | Schedule of Quantities | - | Section - VII |

SCHEDULE 'F':-

Reference to General Conditions of Contract._____

1.1 Name of Work: ROAD WORK NEAR ADMN. BLOCK AT PEC UNIVERSITY OF TECHNOLOGY (CIVIL WORKS).

1.2 Estimated Cost of work: - **Rs. 04,15,945 /-**

1.3 Earnest Money: - **Rs. 8,319/- i.e 2% of DNIT amount.**

1.4 Performance Guarantee 5.00% of tendered value

1.5 Security Deposit 5.00% of tendered value

1.6 Time Allowed **02 Months**

1.7 The following expressions shall unless the context otherwise require have the meanings hereby specifically assigned to them.

1.7.1 University Engineer (PEC University of Technology)
Or Successor thereof

1.7.2 Registrar (PEC University of Technology)
Or Successor thereof

1.7.3 Director (PEC University of Technology)
Or Successor thereof

Or Successor thereof

1.7.4 Delhi Schedule of Rates (DSR) DSR-2014 with correction/amendments latest up-to date

1.7.5 CPWD Specifications CPWD Specifications 2014 latest up-to date

General Rules & Directions:-

Officer Inviting Tender: - University Engineer

Maximum percentage for quantity of items
of work to be executed beyond which rates
are to be determined in accordance with
Clauses 12.2, 12.3 & 12.5 As per clause 12 (Detail given below)

Definitions:-

2(v) Engineer-In-Charge

2(viii) Accepting Authority Director (PEC University of Technology)

2(x) Percentage on cost of
materials and labour to
cover all overheads and
profits 15% (Fifteen Percent)

2(xi) Standard Schedule of Rates Delhi Schedule of Rates 2014

2(xii) Department .PEC University of Technology

8.1 The order of preference: - In the case of discrepancy between the Schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:-

- | | |
|-------|--|
| (i) | Nomenclature of item as per Schedule of Quantities |
| (ii) | Special Conditions. |
| (iii) | Particular Specifications. |
| (iv) | CPWD Specifications. |
| (v) | Architectural Drawings. |
| (vi) | Indian Standard Specifications of B.I.S. |

9(ii) Standard CPWD Contract Form with amendments as per CPWD Form 7 as modified and corrected upto 28.01.2009

Section-III.

Clause-1:-

(i) Time allowed for submission of performance guarantee after date of issue of letter of acceptance	15 days
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(ii) Maximum allowable extension with late fee @ 0.1% per day of the Performance Guarantee beyond the period as provided in (i) above.	1-15 days
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Clause-2:- I. Authority for fixing compensation under clause-2.	University Engineer (PEC University)
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II. Whether clause-2A shall be applicable.	N.A.
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Clause-5:- Time allowed for execution of work.	Refer Para 1.6 Sheet No.II-4
Authority to give fair and	University Engineer (PEC University)

Clause-6, 6A:-	6. (For works upto Rs.150 lacs.)
Clause applicable- (6 or 6A):-	6A (For works more than Rs.150.00 lacs.)

Clause-7:- Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Refer Para (B) Table of Milestones at Sheet No.VI- 15
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Clause-10A:- List of testing equipment to be provided by the contractor at site lab.	N.A.
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Clause-10-B (i). Whether clause 10-B (i) shall be Applicable	NO
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Clause-10-B (ii).	Whether clause 10-B (ii) shall be applicable	Yes (For works costing above 500 lacs.) NIL
Clause-10-CC:-	Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period.	
Clause-11:-	Specifications to be followed for execution of work	C.P.W.D. Specifications
Clause-12:-	Type of Work	Renovation of old Building
Clause-12(a)	Accord sanction of substituted items.	Appropriate clause of CPWD Works Manual 2014 with latest amendment.
Clause 12(b)	Accord sanction of extra items.	-do-
12.2 & 12.3	Deviation limit beyond which clause 12.2 & 12.3 shall apply for building work	Any qty increased/decreased shall be carried out by the contractual agency at contractual rate.
12.5	Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation works	Any qty increased/decreased shall be carried out by the contractual agency at contractual rate.
Clause-16:-	Competent Authority for deciding reduced rates.	As per appropriate clause of CPWD Works Manual 2014. (University Engineer with prior approval from Director PEC University of Technology)
Clause-18:-	List of mandatory machinery tools & Plants to be deployed by the Contractor at site	N.A.
Clause-42:-		
i) a)	Schedule / Statement for determining theoretical quantity of cement & bitumen	Delhi Schedule of Rates 2014.
ii)	Variations permissible on theoretical quantities.	
a)	(i) Cement for works with estimated cost put to tender for more than Rs. 5 Lacs.	2% plus / minus.
	(ii) -do- Less than 5 lacs.	3% plus/minus.
b)	Steel Reinforcement and structure steel sections for each diameter, section and category.	2% plus / minus.
c)	All other materials.	Nil.
d)	Bitumen for all work.	0.3% plus / minus

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No.	Description of item	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond Permissible Variation	Less use from the permissible variation
1.	Cement	As per CPWD work Manual	As per CPWD work Manual
2.	Steel		

SECTION – III

Amendments in Clauses of the General
Conditions of Contract to CPWD Works – 2014 with latest
modification upto date as applicable in this work conditions of
contract as also detailed in Schedule “F”.

S/CHANGES IN CLAUSES OF THE GENERAL CONDITIONS OF CONTRACT
TO CPWD WORKS – 2014

<u>Clause</u>		<u>Existing</u>	<u>Amendment</u>
GCC 2008		We agree to keep the tender open for sixty (60) days from the due date of its opening and not to make any modifications in its terms and conditions.	We agree to keep the tender open for ninety (90) days from the due date of its opening/ ninety days from the date of opening of financial bid and not to make any modifications in its terms and conditions.
GCC 2008 (General Rules & Directions)		Sales-tax/VAT, purchase tax, turnover tax or any other tax on material in respect of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same.	Sales-tax/VAT, (except service tax) purchase tax, turnover tax or any other tax on material in respect of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-in-Charge after satisfying that it has been actually and genuinely paid by the contractor.
GCC 2008 General Conditions of contract-definitions, Item 2			(xv) Date of commencement of work- The date of commencement of work shall be the date of start as specified in Schedule F or the 1 st date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document.
GCC 2008 Clause 1 A		The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lakh subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lakh.	The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lakh subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lakh. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of

<p>GCC 2008 Clause 3 When contract can be determined</p> <p>Clause 10 B (ii) Mobilization advance</p>		<p>xii) If the work is not started by the contractor within 1/8th of the stipulated time.</p> <p>Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. In such a case, the contractor shall execute a Bank Guarantee Bond from a Scheduled Bank as specified by the Engineer-in-Charge for the full amount of mobilization advance before such advance is released. Such advance shall be in two or more installments to be determined by the Engineer-in-Charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-Charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent installments shall be released by the Engineer-in-Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-in-Charge.</p> <p>Provided always that provision of Clause 10 B (ii) shall be applicable only when so provided in 'Schedule F'.</p>	<p>contract granted under provisions of Clause 2 and Clause 5.</p> <p>xii) Deleted</p> <p>Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. Such advance shall be in two or more installments to be determined by the Engineer-in-Charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-Charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent installments shall be released by the Engineer-in-Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-in-Charge. Before any installment of advance is released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for the amount of advance & valid for the contract period. This shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery, together with interest.</p> <p>Provided always that provision of Clause 10 B (ii) shall be applicable only when so provided in 'Schedule F'.</p>
<p>Clause 10B (vi)</p>		<p>The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.</p>	<p>Merged in para (ii) above</p>
<p>Clause 10C – Payment on account of increase in prices/wages due</p>		<p>If after submission of the tender, the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores</p>	<p>If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and not being</p>

to statutory order (s)	<p>in accordance with Clause 10 thereof) and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes in sales tax/VAT) and such increase in the price and/or wages prevailing at the time of the last stipulated date for receipt of the tenders including extensions if any for the work, and the contractor thereupon necessarily and properly pays in respect of that material (incorporated in the works) such increased price and/or in respect of labour engaged on the execution of the work such increased wages, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of the work in question.</p> <p>If after submission of the tender, the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) and/or wages of labour is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes in sales tax/VAT) and such decrease in the prices and/or wages prevailing at the time of receipt of the tender for the work. Government shall in respect of materials incorporated in the works (not being material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 hereof) and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of</p>	<p>a material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes in sales tax/VAT) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, then the amount of the contract shall accordingly be varied and provided further that any such increase shall be limited to the price/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less.</p> <p>If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and not being a material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes in sales tax/VAT) , Government shall in respect of materials incorporated in the works (excluding the materials covered under Clause 10CA and not being material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 hereof) and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of</p>
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		<p>materials and/or wages of labour on the coming into force of such law, statutory rule or order.</p> <p>The contractor shall, for the purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of the Government and further shall, at the request of the Engineer-in-Charge may require any documents so kept and such other information as the Engineer-in-Charge may require.</p> <p>The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.</p> <p>For this purpose, the labour component of the work executed during any period shall be the percentage as specified in Schedule F, of the value of work done during that period.</p>	<p>materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2</p> <p>Engineer-in-Charge may call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages.</p> <p>The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.</p> <p>For this purpose, the labour component of the work executed during period under consideration shall be the percentage as specified in Schedule F, of the value of work done during that period and the increase/decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled adult male mazdoor, fixed under any law, statutory rule or order.</p>
Clause 10 CA Payment due to variation in prices of materials after receipt of tender		<p>If after submission of the tender, the price of materials specified in Schedule F increases/decreases beyond the price(s) prevailing at the time of the last stipulated date for receipt of tenders (including extensions, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that</p>	<p>If after submission of the tender, the price of materials specified in Schedule F increases/ decreases beyond the price(s) prevailing at the time of the last stipulated date for receipt of tenders (including extensions, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that any such</p>

	<p>any such variations shall be effected for stipulated period of contract including the justified period extended under the provisions of Clause 5 of the contract without any action under Clause 2.</p> <p>However for work done/during the Justified period extended as above, it will be limited to indices prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less.</p> <p>The increase/decrease in prices shall be determined by the All India Wholesale Price Indices of materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for materials as issued under the authority of Director General (Works), CPWD as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration. In case, price index of particular material is not issued by Ministry of Commerce and Industry, then the price index of nearest similar material as indicated in Schedule 'F' shall be followed.</p> <p>The amount of the contract shall accordingly be varied for all such materials and will be worked out as per the formula given below for individual material:-</p> $V = \frac{P \times Q \times CI - C_{lo}}{C_{lo}}$ <p>Where,</p>	<p>variations shall be effected for stipulated period of contract including the justified period extended under the provisions of Clause 5 of the contract without any action under Clause 2.</p> <p>However for work done during the justified period extended as above, it will be limited to indices prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less.</p> <p>The increase/decrease in prices of cement, steel reinforcement and structural steel shall be determined by the Price indices issued by the Director General (Works), CPWD. For other items provided in the Schedule 'F', this shall be determined by the All India Wholesale Price Indices of materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for cement, steel reinforcement and structural steel as issued under the authority of Director General (Works) CPWD applicable for Delhi including Noida, Gurgaon, Faridabad & Ghaziabad and for other places as issued under the authority of Zonal Chief Engineer, CPWD and base price of other materials issued by concerned Zonal Chief Engineer as indicated in Schedule 'F' as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration. In case, price index of a particular material is not issued by Ministry of Commerce and Industry, then the price index of nearest similar material as indicated in Schedule 'F' shall be followed.</p> <p>The amount of the contract shall accordingly be varied for all such materials and will be worked out as per the formula given below for individual material:-</p> $V = \frac{P \times Q \times CI - C_{lo}}{C_{lo}}$ <p>where, V = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered. P = Base Price of material as issued under the authority of</p>
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		Clause.	escalation or as prevailing at the time of effecting recovery, whichever is higher.
Clause 10 CC Payment due to increase/decrease in Prices/Wages after Receipt of Tender for Works		<p>Payment due to increase/decrease in Prices/Wages after receipt of tender for works</p> <p>If the prices of materials (not being materials supplied or services rendered at fixed prices by the department in accordance with clause 10 & 34 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than the time as specified in Schedule F. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions:-</p> <p>i) The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any</p> <p>ii) The cost of work on which escalation will be payable shall be reckoned as below :-</p> <p>a) Gross value of work done up to this quarter : (A)</p>	<p>Payment due to increase/decrease in Prices/Wages (Excluding materials covered under clause 10 CA) after Receipt of Tender for Works</p> <p>If the prices of materials (not being materials supplied or services rendered at fixed prices by the department in accordance with clause 10 & 34 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than the time as specified in Schedule F. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions:-</p> <p>i) The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any</p> <p>ii) The cost of work on which escalation will be payable shall be reckoned as below :-</p> <p>a) Gross value of work done up to this quarter : (A)</p> <p>b) Gross value of work done up to the last quarter : (B)</p> <p>c) Gross value of work done since previous quarter(A-B) : (C)</p> <p>d) Full assessed value of Secured</p>

	<p>b) Gross value of work done up to the last quarter : (B)</p> <p>c) Gross value of work done since previous quarter(A-B) : (C)</p> <p>d) Full assessed value of Secured Advance fresh paid in this quarter : (D)</p> <p>e) Full assessed value of Secured Advance recovered in this quarter: (E)</p> <p>f) Full assessed value of Secured Advance for which escalation is payable in this quarter (D-E) : (F)</p> <p>g) Advance payment made during this quarter : (G)</p> <p>h) Advance payment recovered during this quarter : (H)</p> <p>i) Advance payment for which escalation is payable in this quarter (G-H) : (I)</p> <p>j) Extra items paid as per Clause 12 based on prevailing market rates during this quarter : (J)</p> <p>Then , $M = C + F + I - J$ $N = 0.85 M$</p> <p>k) Less cost of material supplied by the department as per Clause 10 and recovered during the quarter : (K)</p> <p>l) Less cost of service rendered at fixed charges as per Clause 34 and recovered during the quarter : (L)</p> <p>Cost of work for which escalation is applicable : $W = N - (K + L)$</p> <p>iii) Components for cement, steel materials, Labour, P.O.L. etc.. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'E'. The decision of the Engineer- in- Charge in working out such percentage shall be binding on the contractors</p> <p>iv) The compensation for escalation for cement, steel and P.O.L. shall be worked as per the formula given below</p>	<p>Advance (excluding materials covered under clause 10 CA) fresh paid in this quarter : (D)</p> <p>e) Full assessed value of Secured Advance(excluding materials covered under clause 10 CA) recovered in this quarter: (E)</p> <p>f) Full assessed value of Secured Advance for which escalation is payable in this quarter (D-E): (F)</p> <p>g) Advance payment made during this quarter : (G)</p> <p>h) Advance payment recovered during this quarter : (H)</p> <p>i) Advance payment for which escalation is payable in this quarter (G-H) : (I)</p> <p>j) Extra items paid as per Clause 12 based on prevailing market rates during this quarter : (J)</p> <p>Then , $M = C + F + I - J$ $N = 0.85 M$</p> <p>k) Less cost of material supplied by the department as per Clause 10 and recovered during the quarter : (K)</p> <p>l) Less cost of service rendered at fixed charges as per Clause 34 and recovered during the quarter: (L)</p> <p>Cost of work for which escalation is applicable : $W = N - (K + L)$</p> <p>iii) Components for materials (except cement, reinforcement bars, structural steel or others materials covered under Clause 10 CA) , Labour, P.O.L. etc.. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'E'. The decision of the Engineer-in- Charge in working out such percentage shall be binding on the contractors.</p> <p>iv) The compensation for escalation for other materials (excluding cement, reinforcement bars , structural steel or other materials covered under clause 10 CA) and P.O.L. shall be worked as per the formula given below:- DELETED</p>
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		<p>(a) Adjustment for component of 'cement'</p> $V_c = \frac{W \times X_c \times CI - C_{lo}}{C_{lo}}$ <p>.....</p> <p>.....</p> <p>b) Adjustment for component of 'steel'</p> $V_s = W \times \frac{X_s}{100} \times \frac{SI - S_{lo}}{S_{lo}}$ <p>.....</p> <p>...</p> <p>.....</p> <p>c) Adjustment for civil component (except cement and steel)/ electrical Component of construction 'Materials'</p> $V_m = W \times \frac{X_m}{100} \times \frac{MI - M_{lo}}{M_{lo}}$ <p>Vm = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.</p> <p>W = Cost of work done worked out as indicated in sub –para (ii) of Clause 10CC.</p> <p>Xm = Component of 'materials' expressed as percent of the total value of work.</p> <p>MI = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for individual Commodities/Group items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the individual Commodities/ Group Items. (In respect of the justified period extended under the provisions of</p>	<p>(b) DELETED</p> <p>c) Adjustment for civil component (except cement, Structural steel, reinforcement bars and other materials covered under clause 10CA) / electrical component of construction 'Materials'</p> $V_m = W \times \frac{X_m}{100} \times \frac{MI - M_{lo}}{M_{lo}}$ <p>Vm = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.</p> <p>W = Cost of work done worked out as indicated in sub–para (ii) of Clause 10CC.</p> <p>Xm = Component of 'materials' (except cement, Structural steel, reinforcement bars and other materials covered under clause 10CA) expressed as percent of the total value of work.</p> <p>MI = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for individual Commodities/ Group items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the individual Commodities/ Group Items. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration, which ever is less shall be considered).</p> <p>Mlo = All India Wholesale Price Index for civil component/electrical component * of construction material as worked out on the basis of All India Wholesale Price Index for individual Commodities/ Group items valid on the last stipulated date of receipt of tender, including extension, if any, as published by the Economic Advisor to Govt. of</p>
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Clause 12.2 Deviation, Extra Items and Pricing		<p>In the case of extra item(s), the contractor may within fifteen days of receipt of order or occurrence of the item(s), supported by determined.</p>	<p>In the case of extra item(s), (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days</p>

		In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.....	of receipt of order or occurrence of the item(s), supported by determined. In the case of substituted items, (items that are taken up with partial substitution or in lieu of items of work in the contract) the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.....
Clause 25 Settlement of Disputes & Arbitration		It is also a term of this contract that no person, other than a person appointed by such Chief Engineer CPWD or the administrative head of the CPWD, as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.	It is also a term of this contract that no person, other than a person appointed by such Chief Engineer CPWD or Additional Director General or Director General of Works, CPWD as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.
Clause 37 Levy/Taxes payable by Contractor		(i) Sales Tax/VAT or any other tax on materials in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect.....	(i) Sales Tax/VAT (except service tax) or any other tax on materials in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect. However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-in-Charge after satisfying that it has been actually and genuinely paid by the contractor.....
Clause 38 Conditions for reimbursement of levy/taxes if levied after receipt of tenders		(i) All tendered rates shall be inclusive of all taxes and levies payable under Respective statutes. However, pursuant to the Constitution (46th Amendment Act, 1982, if any further tax or levy..... control of the contractor.	(i) All tendered rates shall be inclusive of all taxes and levies (except service tax) payable under respective statutes. However, pursuant to the Constitution (46th Amendment Act, 1982, if any further tax or levy..... control of the contractor.
Clause 40 If relative working in CPWD then the contractor to tender		The contractor shall not be permitted to tender for works in the CPWD Circle (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant..... Condition	The contractor shall not be permitted to tender for works in the CPWD Circle (Division in case of contractors of Horticulture/ Nursery categories) responsible for award and execution of contracts in which his Near relative is posted as Condition.
Proforma of Schedules (Schedule A to F) Schedule 'E'		Schedule of component of Cement, Steel , other materials, Labour etc., for price escalation Clause 10 CC	Schedule of component of other materials, Labour, POL etc., for price escalation

		<p>Component of cement – Xc expressed as percent of total value of work%</p> <p>Component of Steel – Xs expressed as percent of total value of work%</p> <p>Component of civil - Xm (Except cement & steel) / Electrical construction materials expressed as percent of total value of work%</p> <p>Component of Labour expressed as percent of total value of work Y%</p> <p>Component of POL expressed as percent of total value of work Z.....%</p>	<p>DELETED</p> <p>DELETED</p> <p>Component of civil - Xm (Except materials covered under clause 10CA) / Electrical construction materials expressed as percent of total value of work%</p> <p>Component of Labour expressed as percent of total value of work Y%</p> <p>Component of POL expressed as percent of total value of work Z.....%</p>
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SECTION –IV

Special Conditions

SPECIAL CONDITIONS

1.0 General

- 1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CPWD Specifications" (Refer Para 1.7.5 of Schedule F at **Sheet No. II - 4** and as per instructions of Engineer-in-Charge. Wherever CPWD Specifications are silent, the latest IS Codes / Specifications shall be followed and the rates should be all inclusive.
- 1.2 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards upto last date of receipt of tenders. **The Contractor shall keep at his own cost all such publications including relevant Indian Standard applicable to the work at site.**
- 1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidelines only).
- 1.4 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, horticulture & electrical etc.
- 1.5 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.6 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 1.7 Equipment like concrete pump excavators/Transit mixer etc. shall be allowed to be moved away from the site when, in written opinion of Engineer-in-Charge, the same are no longer required at site of work.
- 1.8 The contractor, his agents / representative, workman etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.
- 1.9 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 1.10 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 1.11 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.
- 1.12 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to work due to negligence on his part. No hindrances shall be caused to traffic, during the execution of the work.
- 1.13 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.
- 1.14 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in

advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.

- 1.15 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 1.16 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested by the Municipal Body / Corporation authorities wherever required at his own cost.
- 1.17 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work, nomenclature of items, specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supercede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.
- 1.18 The Architectural drawings other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fittings involved unless and otherwise specifically mentioned.
- 1.19 The contractor should submit the shop drawing of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.20 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.21 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 1.22 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 1.23 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.
- 1.24 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In case temporary supporting/shifting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.

In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract.

- 1.25 The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 1.26 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 1.27 For construction works which are likely to generate malba / rubbish to the tune of more than a tempo / truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.
- 1.28 The excavated surplus earth shall be disposed off by the contractor as per directions of Engineer-in-Charge.
- 1.29 **All disputes concerning with this work/tender are subject to the Chandigarh jurisdiction.**
- 2.0 Unless otherwise specified in the schedule of quantities, the rates for respective items shall be all inclusive and apply to the following: -
 - (i) All lifts & all heights, floors including terrace, leads and depths.
 - (ii) All labour, material, tools and plants and other inputs involved in the execution of the item.
 - (iii) Any of the conditions and specifications mentioned in the tender documents.
 - (iv) Pumping / bailing out surface water / rain water / sub soil water, if necessary for any reason.
 - (v) Providing sunk flooring in bath-rooms, kitchen, etc.
 - (vi) Any legal or financial implications resulting out of disposal of earth, if any.
 - (vii) Payment of Royalty at the prevailing rates, if any, on the boulders, metal, shingle, sand and bajri etc. or any other material collected by him for the work direct to revenue authorities.
 - (viii) Performance test of the entire installation(s) before the work is finally accepted.
 - (ix) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items .
 - (x) All incidental charges for cartage, storage and safe custody of materials brought to site.

3.0. **TESTING OF MATERIAL: -**

- 3.1 Samples of materials required for testing shall be provided free of charge by the contractor. The cost of tests shall be borne by the contractor / department in the manner indicated below: -
 - a) By the contractor, if the results show that the material does not conform to relevant specifications.
 - b) By the department, if the results show that the material conforms to relevant specifications.

All other expenditure required to be incurred for taking samples; conveyance, packing etc. shall be borne by the contractor himself.

- 3.2 However, if any ultrasonic pulse velocity / load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.

- 3.3.1 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.

4.0 SECRECY

- 4.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.
- 4.2 The contract in confidential and must be strictly confirmed to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 4.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work / works or the earlier determination of the contract.

5.0 LABOUR AND SECURITY

- 5.1 Contractor should provide his plan for labour huts as per his requirement and get it approved from the Engineer-in-Charge. The contractor will be provided space for labour huts etc. inside the campus but the space requirement and location, as assessed by Engineer-in-Charge shall be final and binding.
- 5.2 Contractor has to follow the security requirement of the campus and obtain necessary entry passes for the labour and vehicles and follow security checks at entry / exit gates, restriction on movement of vehicle, restricted timings of working etc. The Department however shall assist the contractor in obtaining such passes for movement of vehicles and labour. No claim whatsoever shall be entertained on account of delay in entry of vehicles and labour including restrictions in working hours, if there is any.
- 5.3 The contractor shall employ only Indian Nationals after verifying their antecedents and loyalty. The contractor shall, on demand submit list of his agents, employees and work people concerned & shall satisfy as to the bonafides of such people.
- 5.4 The contractor & his work people shall observe all relevant rules regarding security promulgated in which work is to be carried out by the Controlling Administrative Authority of the campus/area (hereinafter referred to as "Administrator").
- 5.5 The contractor, his representative, workman shall be allowed to enter through specified gates & timing as laid down by the controlling authority. They shall be issued an identity card or an individual pass in accordance with the standing rules & regulations & they should possess the same while working. The contractor shall be responsible for the conduct & actions of his workman, agents / representatives.
- 5.6 Normally contractor shall be allowed to carryout work between 7 AM to 6 PM. However, he may also be allowed to carryout the work beyond 6 PM & upto 7 AM if the site conditions / circumstances so demand with prior written permission from the "Administrator". However, if the work is carried out in more than one shift or at night, no claim on this account shall be entertained.
- 5.7 Normally contractor's material / vehicles etc shall be allowed to move in / go-out between 7 AM to 7 PM only & no movement of material / vehicles out of site of work shall be allowed during night hours unless specific permission is obtained from the "Administrator".
- 5.8 In case if a separate entry has been allowed, the contractor has to make all arrangement for making a separate entry gate and barricading of the working area to segregate/separate the same from other areas. All these have to be done by the contractor at his own cost including safeguarding any untoward incident in the restricted area due to separate entry gate and barricading arranged by the contractor. No extra amount on this account shall be payable by the department.

6.0 TRANSPORTATION AND OFFICE INFRASTRUCTURE:

- 6.1 In order to complete the work within the scheduled time if the contractor shall be required to do the work in more than one shift and accepted by the department the contractor will provide vehicular facilities to the CPWD site staff to reach the site and their residence at his own cost for their services required

beyond the normal office hours. In case the contractor fails to provide the facilities Engineer-in-Charge shall be at liberty to make the arrangement themselves and deduct the respective cost from the contractor's bills.

6.2 For Quality Control Measures, Preparation of Bills and Monitoring the Quality, the contractor shall provide (min. one number) Computer having MS-Windows XP, A-3 Coloured Inkjet & A-4 Laserjet Printers, Scanners, UPS etc. with required number of data entry operator in the site office of Engineer-in-Charge.

7.0 **PROGRAM CHART: -**

7.1 The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within **15 days** of the issue of letter of acceptance for the contract.

7.2 The work has to be completed in stages as indicated in the **Milestones under Schedule 'F'** and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.

7.3 The program chart should include the following: -

- a) Descriptive note explaining sequence of various activities.
- b) Network (PERT / CPM / BAR CHART) which will indicate resources in financial terms, manpower and specialized equipment for every important stage.
- c) Program for procurement of materials by the contractor.
- d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.

7.4 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.

7.5 The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

Notwithstanding the fact that the contractor will have to pay to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour regulations and the agreement entered upon and/or extra amounts for any other reason.

8.0 **PROGRESS AND MONITORING OF WORK:**

Contractor shall give the Engineer-in-Charge on the 10th day of each month, progress report of the work done during the previous month. Such progress report will include the project progress summary, work progress (planned v/s. actual), PERT chart, milestone status, financial progress status, manpower deployment status, important materials consumed, materials at site at the beginning of the month, materials consumed during the month and the balance quantities at the end of month and progress of the work stating the reasons for shortfall, if any including the steps and measures to be taken for making good the shortfall in the succeeding period. Non submission of aforesaid progress report shall make contractor liable for action under breach of contract conditions.

9.0 **SAMPLE OF MATERIALS:-**

9.1 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a

particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per **List of Preferred Makes as at Sheet No. VI-12 & 13** for approval of Engineer-in-Charge. For all other items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.

- 9.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 9.3. BIS marked materials except otherwise specified shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.

BIS marked items (except cement & steel for which separate provisions have been made in para 10.0) required on the work shall be got tested, for only important tests, which govern the quality of the product, as decided by the Engineer-in-Charge. The frequency of such tests (except the mandatory test) shall be 5% of the frequency as specified in BIS. For mandatory test, frequency shall be as specified in the CPWD Specifications

- 9.4 For certain items, if frequency of tests is neither mentioned in the CPWD Specifications & BIS, then tests shall be carried out as per decision of Engineer-in-Charge.

10.0 **CEMENT & STEEL REINFORCEMENT (IF NOT STIPULATED TO BE SUPPLIED BY THE DEPARTMENT).**

- 10.1 Contractor has to produce manufacturers test certificate for each lot of Cement & Steel Reinforcement procured at site.

10.2 **CEMENT:-**

- 10.2.1 The contractor shall procure 43 Grade Ordinary Portland Cement and/or Portland Pozzolona Cement (Fly Ash based), required in the work from reputed manufacturers of cement as per the approved make in 50 kg. bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot. Portland Pozzolona Cement is however not to be used for RCC works.

- 10.2.2 Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. The cement for such testing purpose shall be supplied by the contractor free of charge. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so. The cost of tests shall be borne by the contractor/department in the manner indicated below:

- i) By the contractor, if the results show that the cement does not conform to relevant BIS Codes.
- ii) By the department, if the results show that the cement conforms to relevant BIS Codes.

- 10.2.3 OPC/ PPC shall be brought at site in bulk supply of approximately 30 tonnes or as decided by the Engineer-in-Charge.

- 10.2.4 OPC/ PPC bags shall be stored in separate godowns. Separate godowns for tested cement and fresh cement (under testing) to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications having weather-proof roofs and walls. The size of the cement godown is indicated in the sketches for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-Charge of the work and that of other lock with

the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed proforma and signed daily by the contractor or his authorized agent and Engineer-in-Charge or his authorized representative in token of its correctness. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the contractor or his authorized representative which shall be duly signed by the authorized representative of the Engineer-in-Charge before issue to the work on day to day basis.

The capacity of each cement go-down shall be 1000 bags of cement or more as decided by the Engineer-in-Charge and shall be constructed by the contractor at site of work and at the site of batching plant for which no extra payment shall be made. The contractor shall be responsible for the watch and ward and safety of the cement go-downs. The contractor shall facilitate the inspection of the cement go-downs by the Engineer-in-Charge at any time.

10.2.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause-42 of the contract and shall be governed by the conditions laid therein.

10.2.6 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in Clause - 42), the cost of quantity of cement not so used shall be recovered from the contractor as specified in schedule. Decision of the Engineer-in-Charge in regard to theoretical quantity of cement which should have been actually used as per the schedule and recovered at the rate specified, shall be final and binding on the contractor.

For non-scheduled items, the decision of the Superintending Engineer regarding theoretical quantity of the cement, which should have been actually used, shall be final and binding on the contractor.

10.2.7 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.

10.2.8 In case the contractor brings surplus quantity of cement the same shall be removed from the site after completion of work by the contractor at his own cost after approval of the Engineer-in-Charge.

10.2.9 Cement, which is not used within 90 days from its date of manufacture, shall be retested at approved laboratory. Until the results of such tests are found satisfactory, it shall not be used on the work.

13.0 Defect liability:

13.1 The contractor's liability during the defect liability period from the final date of completion as per clause 17 shall be limited to rectification of defects including replacement as follows which in the opinion of Engineer-in-Charge are not man made.

Sl. No.	Description	Defect Liability
(i)	Anti termite treatment.	(a) Termites found if any till guarantee period to be rectified through post ATT.
(ii)	Concrete	(a) Rectification of structural / superficial / non-structural cracks. (b) Rectification of dampness / seepage in roof slab / junctions & sunken portion. (c) Rectification of cracks in beam, shade, column.
(iii)	Brick work	(a) Rectification of cracks in panel wall / portion. (b) Cracks / settlement of dwarf walls. (c) Rectification of efflorescence.
(iv)	Joinery	(a) Replacement of warped joinery. (b) Cracks in panels, rails / styles etc.
(v)	Builders	(a) Repairs / Replacement of loosened / pre-mature failure of

Sl. No.	Description	Defect Liability
	Hardware	fittings. (b) Tightening / Replacement of sag in mosquito proofing.
(vi)	Steel & Iron work	(a) Rectification / Replacement of defective part of rolling shutter. (b) Redoing of defective portion in fabrication / welding including painting. (c) Steel windows, grills, gates etc. – defects to be rectified.
(vii)	Roof treatment	(a) Rectification of leakage / seepage of roof slab including covering at junction till guarantee period.
(viii)	Plastering	(a) Rectification of structural / superficial cracks if any. (b) Rectification of protruding / peeling off plaster if any. (c) Rectification of efflorescence
(ix)	Flooring	(a) Rectification of sinking portion of plinth protection including saucer drain. (b) Settlement of foundation & floors.
(x)	Plumbing / Sanitary fittings	(a) Making good of leakage through soil / waste pipe joints. (b) Replacement of looking mirror if found wavy. (c) Rectification of leakage of over head tanks. (d) Leakage / seepage of sunken floor, blockage of taps / pipes, non-functioning of cistern.
(xi)	Finishes	(a) Making good of defective / dissimilar patches of painting to match with remaining surfaces.
(xii)	Internal Water Supply	(a) Repairs / Replacement of defective taps / fittings. (b) Repair to leakage of GI water pipe lines including joints. (c) Removal of blockage of GI pipe lines.
(xiii)	Roads	(a) Repair of sinking portion of road & potholes, if any
(xiv)	Sewage	(a) Rectification of slope / system if found defective during use. (b) Rectification of major blockage in Sewer lines. (c) Cracks & settlement of sewage lines.
(xv)	Drains	(a) Repair to Drains. (b) Settlement of Drains
(xvi)	External Water Supply	(a) Repairs to installations & fittings.
(xvii)	General	(a) All manufacturing defects of structures / fixtures / fittings / equipments other than listed above.

16. Supplementary special condition :

- 16.1 The stone aggregate for R.C.C. / C.C. items shall be double screened and washed and shall comply with the grading requirement as specified in IS-383 (latest edition) for stone aggregate besides meeting other requirement as specified their in. If the contractor / agency to use crushed aggregate nothing extra shall be paid on this account.
- 16.2 The contractor agency shall make his own arrangement of water for construction purposes. Incase, the contractual agency takes temporary water connection from M.C., Chandigarh, the recovery of water charges @ 1.5% shall be made as per Notification issued by the Secretary Local Govt. Chandigarh Administration vide notification No. 6/1/195-FII(8)2011/4088, dated 24.05.2011 conveyed vide E.E. M.C. P.H. Division No. 2 vide memo no. 1533-62, dated 02.06.2011.

- 16.3 Labour Cess shall be deducted from the C.C. running & final bills and that amount will be deposited to the Chandigarh Building and Other Constructions Workers Welfare Funds.
- 16.4 The contractor shall have to obtain labour license from the Assistant Labour Commissioner, Chandigarh after getting his established registered under the Building and other Construction Act 1996 notified vide Chandigarh Administration No. 353-383 dt. 15.1.2010 issued by the Registering Officer, under the Building and other construction workers Act and Assistant Labour Commissioner, U.T. Chandigarh U.T.
- 16.5 The bidder shall have to give undertaking regarding constitution of the firm /business i.e. whether proprietorship firm/Partnership firm/ Limited Company/Public Limited Company at the time of submission of tender and any change in the same at any stage shall be immediately intimated in writing to the Engineer-in-charge. In case of partnership/Limited/Public Limited companies, the Article of Memorandum of Association shall be submitted by the bidder.
- 16.6 Sales-tax / Vat (except service tax), purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-in-charge after satisfying that it has been actually and genuinely paid by the contractor.
- 16.7 The department will assist in arranging electric and water connection at the site of work. However the Security / Consumption / installation charger shall be borne by the contractor.
- 16.8 In case of failure or default in the performance or responsibilities or breach of terms and conditions of DNIT or agreement, action as per **"Policy on blacklisting, 2009"** issued vide Finance Department Chandigarh Administration Notification No. 1927-F&PO(3)-2009/1170 dt. 27.2.2009 shall be taken.

- 16.12 Only one common %age above or below the rates / amount mentioned in th DNIT shall be quoted by the bidder for all items. Any other item of DSR2014 if required to be executed shall be paid on DSR2014 rates + prevailing cost index on DSR +% (plus / minus percentage) quoted by the bidder. Similarly rates for extra N.S. items got executed shall be adjusted by applying the quoted %age on the approved analysis of rate for the respective item.
- 16.13 All deviation beyond permissible limit shall be paid with financial approval of the competent authority at the already approved contractual rates for the respective items.

SECTION – V

Particular Specifications

PARTICULAR SPECIFICATIONS

1.0 EARTH WORK:- As per MORT&H / CPWD Specifications

2.0 Granular sub base grading as per following table :

TABLE 400.1 OF MORT&H SPECIFICATION, GRADING FOR COARSE GRADED GRANULAR SUB BASE

IS Sieve Designation	Percent by weight passing the IS Sieve					
	Grading I	Grading II	Grading III	Grading IV	Grading V	Grading VI
75.0mm	100	-	-	-	100	-
53.0mm	80-100	100	100	100	80-100	100
26.5mm	55-90	70-100	55-75	50-80	55-90	75-100
9.50mm	35-65	50-80	-	-	35-65	55-75
4.75mm	25-55	40-65	10-30	15-35	25-50	30-55
2.36mm	20-40	30-50	-	-	10-20	10-25
0.85mm	-	-	-	-	2-10	-
0.425mm	10-15	10-15	-	-	0-5	0-8
0.075mm	<5	<5	<5	<5	-	0-3

3.0 The sources of coarse aggregate, fine aggregate, to be used in bituminous work shall be identified by the contractor & he will satisfy himself regarding their conforming to the relevant specifications & the availability before getting the same approved from the Engineer-In-Charge.

(a) Coarse Aggregate:- As per MORT&H Specifications

(b) Fine Aggregate:- As per MORT&H Specifications

4.0 PRE-CAST CC WORK

4.1 The work shall be done in accordance with CPWD Specifications.

4.2 Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-charge before taking up the work.

4.3 Pre-cast units shall be clearly marked to indicate the top of member and its location.

4.4 Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.

4.4 The compaction of the concrete shall be done by vibrating, table or external vibrator, as approved by Engineer-in-charge. The rate quoted for the item shall include the element for framework and mechanical vibration.

5.0 Wet mix macadam grading as per following table :

TABLE 400.13 OF MORT&H SPECIFICATION, GRADING FOR WET MIX MACADAM

IS Sieve designation	% by weight passing IS sieve
53.00 mm	100
45.00 mm	95-100
22.40 mm	60-80
11.20 mm	40-60
4.75 mm	25-40
2.36 mm	15-30
600 micron	8-22
75 micron	0-8

Note : The material finer than 425 micron shall have plasticity Index not exceeding 6

6.0 Grading of Dense graded bituminous macadam as per following table :

TABLE 500.10 OF MORT&H SPECIFICATION, Composition of Dense Graded Bituminous Macadam.

IS Sieve designation	Cumulative % by weight of total aggregate passing
37.50 mm	100
26.50 mm	90-100
19.00 mm	71-95
13.20 mm	56-80
4.75 mm	38-54
2.36 mm	28-42
0.30 mm	7-21
0.075 mm	2-8
Bitumen content % by mass of total mix	4.5 % (Maximum)

7.0 Grading of bituminous concrete as per following table :

TABLE 500.17 of MORT&H specification : Composition of Bituminous concrete pavement layers.

IS Sieve designation	Cumulative % by weight of total aggregate passing
19.0 mm	100
13.20 mm	90-100
9.50 mm	70-88
4.75 mm	53-71
2.36 mm	42-58
1.18 mm	34-48
0.6 mm	26-38
0.30 mm	18-28
0.15 mm	12-20
0.075 mm	4-10

Bitumen content % by mass of total mix 5.4 % (Maximum)

8.0 Grading of bituminous Macadam as per following table :

TABLE 500.7 of MORT&H specification : Aggregate grading and bitumen content.

IS Sieve designation	Cumulative % by weight of total aggregate passing
26.50 mm	100
19.00 mm	90-100
13.20 mm	56-88
4.75 mm	16-36
2.36 mm	4-19
0.30 mm	2-10
0.075 mm	0-8

Bitumen content % by mass of total mix 3.4 % (Maximum)

9.0 APPROVAL OF DESIGN MIX

The design mix shall be considered satisfactory and approved if at least three preliminary test-sets individually satisfy the following strength and workability criteria:

- (a) The average strength of each test-set is not less than the specified target mean compressive strength (T_{ck}).
- (c) The concrete mix is of required degree of workability and acceptable concrete finish.

10.0 MEASUREMENT -

- (i) As per CPWD/MORT&H Specifications.

11.0 TOLERANCES - As per CPWD/ MORT&H Specifications.

12.0 RATES: -

- (i) The rate includes the cost of materials, labour and T&P, including mixing, placing, transportation involved in all the operations described above.

13.0 R C C WORK (Ordinary)

13.1 The work shall be done in accordance with CPWD Specifications.

13.2 Water Cement ratio for Ordinary RCC work shall not be more than 0.5. Contractor shall use concrete mixture of proper design having arrangement for measuring water for mixing of concrete.

14.0 FORM WORK

14.1 The work shall be done in general as per CPWD Specifications.

14.2 Only M.S. centering / shuttering and scaffolding material unless & otherwise specified shall be used for all R.C.C. work to give an even finish of concrete surface. However, marine-ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor to be approved by the Engineer-in-Charge.

14.3 Nothing extra shall be paid for the centering and shuttering, circular in shape whenever the formwork is having a mean radius exceeding 6m in plan.

14.4 Nothing extra shall be paid for grid beams and the corresponding slabs having clear span more than 1.20 metres.

14.5 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications, the level of top surface of R.C.C. shall be accordingly adjusted at the time of its centring, shuttering and casting for which nothing extra shall be paid to the Contractor.

14.6 Steel shuttering as approved by the Engineer-in-Charge shall be used by the contractor. Minimum size of shuttering plates shall be 600mm x 900mm except for the case when closing pieces are required to complete the shuttering panels.

Dented, broken, cracked, twisted or rusted shuttering plates shall not be allowed to be used on the work.

The shuttering plates shall be cleaned properly with electrically driven sanders to remove any cement slurry or cement mortar or rust. Proper shuttering oil or de-bonding compound shall be applied on the surface of the shuttering plates in the requisite quantity before assembly of steel reinforcement.

15.0 PRE-CAST RCC / PCC WORK

15.1 The work shall be done in accordance with CPWD Specifications.

15.2 Pre-cast reinforced concrete units shall be of grade or mix as specified. Provision shall be made in the mould to accommodate fixing devices such as hooks etc. and forming of notches and holes. Each unit shall be cast in one operation. A sample of the unit shall be got approved from Engineer-in-charge before taking up the work.

15.3 Pre-cast units shall be clearly marked to indicate the top of member and its location.

15.4 Pre-cast units shall be stored, transported and placed in position in such a manner that these are not damaged.

15.5 The compaction of the concrete shall be done by vibrating, table or external vibrator as approved by Engineer-in-charge. The rate quoted for the item shall include the element for framework and mechanical vibration.

15.6 Rate for item includes cost of all materials, labour, and all operations involved. Cost of M.S. frames, lugs including their welding, lifting hooks is also included.

SPECIAL CONDITIONS FOR ROAD WORKS

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- 1 It shall be ensured prior to actual execution that the borrow area material to be used in the sub-grade satisfies the requirement to design CBR (not less than 5% , under soaked condition.)
- 2 Sub-grade shall be compacted and finished to the design strength consistent with other physical requirements. The actual laboratory CBR values of constructed sub-grade shall be determined on remolded sampled IRC 37-19874 shall be referred to for details.
- 3 The thickness of the sub grade shall be completed to achieve at least 97% of MDD at OMC.
- 4 The work has to be executed mechanically for which the following major machinery is required to be arranged by the contractor.
 1. J.C.B (Joseph Civil Bamphered) and dumpers for excavation and disposal of excavated earth and road material.
 2. Hot Mix Plant fitted with centralized control panel and electronic load sensor.
 3. Mechanically paver finisher with vibratory system in screed.
 4. Wet Mix Macadam mixing plant along with necessary equipment.
 5. Static/Vibratory roller.
- 5 The contractor shall establish a field laboratory at site of work/plant site for carrying out tests for quality control as per clause 900 of MORT&H (Ministry of Road Transport & Highways) specifications (5th edition.)
- 6 The contractor shall take all measures for the safety of traffic during construction and provide, erect and maintained such barricades including signs, markings, flags, lights and flagman as necessary at either end of excavation/embankment and at such intermediate points as directed by Engineer-in-charge for the proper identification of construction area. He shall be responsible for all damages and accidents caused due to negligence on his part. Nothing extra shall be payable on this account. The Engineer-in-charge will assist the contractor for diverting the traffic with the help of local police.
- 7 The temporary warning lamps shall be installed at the barricade during the hours of darkness and kept lit all times during these hours.
- 8 The Bitumen shall be arranged by the agency himself from govt. approved source and stock of the same shall be checked with proof of its purchase from Engineer-in-charge.
- 9 The contractor shall propose different size and percentage of coarse and fine aggregate along with bitumen which shall be termed as job mix Formula from Govt. Approved laboratory at his own cost confirming to provision to clause 507.3.3 of MORT&H specifications and the same shall be got approved from Engineer-in-charge.
- 10 For bases and surface courses (Bituminous), the material, mix design and construction operation shall confirm the section -500 of MORT&H Specifications.
- 11 The contractor shall start laying work only after achieving the required mixing and temperature of the mix and the same shall be got duly checked from Engineer-in-charge or authorized by the Engineer-in-charge.
- 12 If due to over-heating or under heating of bitumen proper mixing is not obtained then work shall be rejected and shall have to be removed and re-laid. No extra payment on this account will be allowed.
- 13 Surface of tack coat shall be swept clean and free from dust and any extraneous material with higher pressure air jet or by other means as directed by the Engineer-in-charge.
- 14 The percentage of bitumen for Bituminous Surface Courses, as mentioned in the description of items is only for the reference of contractors to quote their rates. However, the actual percentage of bitumen shall be as approved job mix formula. The variance in actual percentage of bitumen used shall be assessed and payment adjusted, up or down accordingly. The permissible variation from the job formula shall be as per Table 500.13 of MORT&H (Ministry of road transport and highways) specification. If the variation of various ingredients is more than permissible, the work is liable to be rejected. In case the actual consumption of bitumen (based on extraction test) is less than approved job mix formula but within the permissible limit, then the recovery shall be made on account of less quantity of bitumen used. However, if the actual consumption of bitumen based on extraction test is more than the job mix formula but within the permissible limits, then nothing extra shall be paid on account of excess quantity of bitumen used than job mix formula.
- 15 The rate of straight run bitumen of Grade VG-10 and VG-30 will be taken as respectively for analysis purpose. The analytical rates will be calculated on the basis of above rates if there is any variation in the rate of bitumen to be supplied by IOC (Indian Oil Corporation) will be assessed, the payment will be adjusted up and down accordingly with the conditions that extra for increase in rate of bitumen shall be payable only if the bitumen is arranged by contractor within the stipulated period of contract including the justified period extended under the provision of clause 5 of the contract without any action under clause 2. However if the rate of bitumen decreases at any stage till the completion then deduction shall be made on account of decrease in rate of bitumen. It will be limited to indices prevailing at the time of stipulated date of completion or as prevailing for the justified extended period, whichever is less. The contractor shall be required to produce the actual bill of purchase of bitumen.

- 16 The bituminous material will be mixed at hot mix plant with computerized control panel at Chandigarh or within a distance of 25 kilometer from the farthest point of work owned by the agency.
- 17 The agency should quote the rate in figures as well as in words on the schedule of items supplied to the agency.
- 18 The quantities of items as detailed are tentative and can be increased/decreased as per actual requirement at site by Engineer-in-charge.
- 19 The work shall be carried out as per C.P.W.D./MORT&H (Ministry of Road Transport and Highways) Specifications latest edition. If any item is not available in the C.P.W.D. relevant ISI (Indian Standard Institute) specification shall be followed.
- 20 Rate for the items are inclusive of all the labour, T&P, incidental and over head charges, contractor's profit unless otherwise specified. The contractor shall quote the rates accordingly.
- 21 Royalty at the prevalent rates and all other incidental expenditure shall have to be paid by the contractor on all the boulder, metal, shingle, earth, sand, bajri etc. collected by him for the execution of work direct to the concerned Revenue Authority of the State or Central Govt. His rates are deemed to include all such expenditure and nothing extra shall be paid.
- 22 The contractor or his authorized representative should always be available at the site of work to take instructions from the Departmental officers and ensure proper execution of work. No work should be done in the absence of such authorized representative.
- 23 Any material left at site one month after completion of work shall become the property of department and no payment shall be made to the contractor for the material.
- 24 Contractor is not at liberty to remove from site of work any material which has been issued to him for use on the work without written permission of the Engineer-in-charge.
- 25 The test certificate from Factory /Test Lab will be supplied by the agency along with each consignment of material for work. The Corporation has every right to collect the sample from the site and get the same tested from reputed/Govt. Test Laboratories at any time on the behest of contractual agency. In case the agency failed to set up the lab where all the physical tests at site and relevant laboratory tests can be conducted, then Engineer-in-Charge will get all the relevant tests conducted from govt. approved lab at the risk and cost of the contractual agency, to ensure the quality of work as per DNIT.
- 26 Any error in Description, Quantity or Rate in Schedule of Quantities or any omission there of shall not vitiate the contract or release the Contractor from the execution of the whole or any part of the work comprised therein according to drawing and specifications or from any of his obligations under the contract.
- 27 If there are varying or conflicting provision made in any documents forming part of the contract, the accepting authority shall be the deciding authority with regard to the interpretation of the document and his decisions shall be final and binding on the contractor/agency.

SECTION – VI

Annexure

FORM OF PERFORMANCE SECURITY
BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between _____ and _____ (hereinafter called "the said contractor(s)" for the work _____ (hereinafter called "The said agreement") having agreed to production of a irrevocable Bank Guarantee for Rs. _____ (Rupees _____ only) as security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We _____ (hereinafter referred to as "the Bank) hereby undertake to
(indicate the name of the bank)
pay to the Government an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the Government.
2. We _____ do hereby undertake to pay the amounts due and payable
(indicate the name of the bank)
under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).
3. We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We _____ further agree that the guarantee herein contained shall
(indicate the name of the Bank)
remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
5. We _____ further agree with the Government that the government
(indicate name of the bank)
shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We _____ lastly undertake not to revoke this guarantee except (indicate the name of Bank)

with the previous consent of the Government in writing.
8. This guarantee shall be valid upto _____ unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _____ (Rupees _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the _____ day of _____ for _____.

GUARANTEE BOND TO BE EXECUTED BY THE CONTRACTOR
FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF
ROAD WORK NEAR ADMN. BLOCK (CIVIL WORK) .

The agreement made this..... day of (Two Thousand only) between S/o(hereinafter called the GUARANTOR of the one part) and the PRESIDENT OF INDIA (hereinafter called the Government of the other part)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated and made between the GUARANTOR OF THE ONE PART AND the Government of the other part, whereby the contractor inter alia, undertook to render the work in the said contract recited structurally stable, leak proof and sound material, workmanship, sealing, etc as specified in bill of quantities .

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, and finishing for two years from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that work executed by him will be free from any leakage, seepage, cracks in pipes and guaranteed against faulty material and workmanship, defective galvanizing for two years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-In-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect to satisfaction of Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the guarantor's cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to make good all defects or commits breach thereunder, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-charge will be final and binding on both the parties.

IN WITNESS WHEREOF these presents have been executed by the obligator and by for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of :-

1..... 2.

SIGNED FOR AND ON BEHALF OF THE PRESIDENT OF INDIA BY..... in the presence of :-

1..... 2.

FIELD TEST DETAILS , FIELD TEST EQUIPMENT & INSTRUMENTS & PROPFORMA FOR TESTING

LIST OF FIELD TESTS

- i) Particle size and shape
- ii) Slump test
- iii) Flakiness & Elongation Index tests
- iv) Compressive strength (concrete or bricks) test
- v) Rebound Hammer test
- vi) Bulking of sand
- vii) Silt content of sand
- viii) Temperature measuring with thermometer with brass protected end 0-200° C
- ix) Bituminous Content
- x) Density
- xi) Physical test of Cement.

FIELD TESTING EQUIPMENT AND INSTRUMENTS

A. Testing Equipment at Field Laboratories

- i) Balances
 - a) 7kg to 10 kg. Capacity, Semi-self indicating type-Accuracy 10 gm
 - b) 500 gm. Capacity, Semi-self indicating type Accuracy 1 gm
 - c) Pan Balance – 5 Kg. Capacity, accuracy 10 gm.
- ii) Sieves: as per IS 460-1962.
 - a) I.S. Sieves – 450 mm internal dia of sizes 100 mm, 80 mm, 63 mm, 50mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm complete with lid and pan.
 - b) IS Sieves – 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan.
- iii) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
- iv) Equipment for slump test – Slump Cone, Steel Plate, tamping rod, steel scale, scoop.
- v) 100 tonnes compression testing machine, electrical-cum manually operated.
- vi) Graduated measuring cylinders 200 ml capacity
- vii) Enamel trays (for efflorescence test for bricks and other tests)
 - a. 300 mm X 250 mm X 40 mm
 - b. Circular plates of 250 mm dia
 - c. 600 mm X 450 mm X 500 mm
 - d. 450 mm X 300 mm X 40 mm.
- viii) ISI marked 150 X 150 X 150 mm concrete cube moulds as per site requirement.
- ix) Graduated cylinder 1000 ml. Capacity.

B. Field Testing Instruments

- i). Steel tapes – 3 m
- ii). Vernier Calipers
- iii). Micrometer Screw 25 mm gauge
- iv). A good quality plumb bob
- v). Spirit level minimum 30 cms long with 3 bubbles for horizontal vertical
- vi). Wire gauge (circular type) disc.
- vii). Foot rule
- viii). Long nylon thread
- ix). Rebound hammer for testing concrete
- x). Ultrasonic Pulse velocity meter
- xi). Magnifying glass
- xii). Screw driver 30 cms long
- xiii). Ball pin hammer, 100 gms
- xiv). Plastic bags for taking samples
- xv). Digital Distance meter
- xvi). Levelling machine
- xvii). Theodolite

C. ESSENTIAL T&P/MACHINERY FOR THIS WORK TO BE ARRANGED/INSTALLED AT SITE OF WORK BY THE CONTRACTOR

- | | | |
|------------------------------|--------------------------|---------------------|
| 1. Hot Mix Plant electronic | 2. Vibratory Road Roller | 3. Tar sprayer |
| 4. Static Road Roller | 5. Water Tanker | 6. Tractor- Trolley |
| 7. Mechanical Paver finisher | | |

PROFORMA FOR TESTS CARRIED OUT

NAME OF THE WORK :

DIVISION/

AGREEMENT NO. & DATE :

SUB-DIVISION

Sl. No.	Item	Quantities as per agreement	Frequency as per specification	No. of tests required	R.A. bill No.	Uptodate quantity	No. of tests required	No. of tests actually done	Remarks
1	2	3	4	5	6	7	8	9	10

Signature of Contractor

LIST OF PREFERRED MAKES FOR CIVIL / SANITARY WORKS

S.No.	Material	Preferred make
CIVIL ITEMS		
1. (i)	Ordinary Portland/Portland Pozzolona Cement (Grey) (43 Grade)	: ACC, L&T, Gujarat Ambuja, Vikram, Birla, JK Cement, JP Rewa., Shree, J.K. Lakshmi, M/s Binani Cement.
(ii)	White Cement	: Birla White / J. K. White
(iii)	Synthetic Enamel Paint	: ICI (Dulux), Nerolac , Berger, Asian Paints, Shalimar

PUBLIC HEALTH ITEMS

5.	CP Fittings/Mixer Pillar taps Washers	: Kingston, Gem, Parko, Techno, JAL, Sieko, ESS ESS JAQUAR, Crabtree, NOVA EXCEL
6.	CP Accessories	: Kingston, Parko, Gem, JAL, Seiko, ESS ESS. JAQUAR
9.	G.I. Pipes	: B.S.T., Jindal (Hissar), Tata Steel Tubes Ltd., Prakash Surya
10.	G.I. Fittings	: Unik, KS, AMCO, AVR, NVR, RR, SUW

ELECTRICAL ITEMS

20.	Electric Cables)	: Finolex, Havells
21.	Main Switch	: Havells, Standard, Crompton
22.	MCCB/ELCCB/Shut-Cabacter	: L&T, ABB, Siemens, GE, Havells
23.	Metering Equipments	: AE/L&T/BCH.
24.	On-Off Sleetor	: L&T/BCH.

TABLE OF MILE STONE (S)

**Name of Work:- ROAD WORK NEAR ADMN. BLOCK AT PEC UNIVERSITY OF TECHNOLOGY
(CIVIL WORKS).**

Para (A) In Physical / Financial Terms: -

Milestone Programme			
Sl. No.	Gross Work Done Of Total Work Allotted	Time Allotted (From date of start)	Amount to be withheld in case of non-achievement of milestone
1.	20 %	15 days	1.25% of Tendered Amount
2.	50 %	30 days	1.25% of Tendered Amount
3.	80 %	45 days	1.25% of Tendered Amount
4.	Completion of work i/c testing etc. complete	60 days	1.25% of Tendered Amount

Para (B): -

Gross work to be done together with net payment/ adjustment of advances for material collected if any, since the last such payment for being eligible to interim payment

Rs. 04,15,945 /-