

University Works Division  
Guru Gobind Singh Indraprastha University  
Sector 16 C, Dwarka

Press Notice for Publishing Newspaper

**NOTICE INVITING TENDERS**

The Executive Engineer, University Works Division, GGSIPU, Sector 16 C, Dwarka invites on behalf of Guru Gobind Singh Indraprastha University Item Rate tenders from approved and eligible contractors of CPWD enlisted in appropriate class (Civil) for following work(s):-

Name of work : A/A GGSIP University, Dwarka Campus, New Delhi

Sub Head: Construction of tennis and basketball court.

NIT No: 14/SE/UWD/2013-2014

Estimated Cost : Rs. 95,20,518/-, Time of completion : 75 days  
EMD: Rs. 1,90,410/-

The tender forms and other details can be obtained from the O/o EE, UWD, GGSIPU on payment of Rs.1000/- The last date upto which tender documents can be submitted is 06/08/2013 up to 1500 Hrs and same can also be downloaded from website [www.ipu.ac.in](http://www.ipu.ac.in). Other detail / information can be seen on website [www.ipu.ac.in](http://www.ipu.ac.in)

**EE/UWD**

## NOTICE INVITING TENDER

F.No.GGSIPU/UWD/2013/1319-21

Dated:24/07/2013

The Executive Engineer, University Works Division, on behalf of the GGSIPU invites Sealed Item Rate tenders from approved and eligible contractors of CPWD enlisted in appropriate class (Civil) for the work of:-

S. No.	NIT No.	Name of work & Location	Estimated cost put to tender	Earnest money	Time of completion	Last date & Time	Time & date of submission/ & opening of tender
						Issue of tender documents/down loading tender document from website	
1	2	3	4	5	6	7	8
1	14/SE/UWD/2013-2014	A/A GGSIP University, Dwarka Campus, New Delhi SH: Construction of tennis and basketball court .	Rs. 95,20,518/-	Rs. 1,90,410/-	75 days	05/08/2013, 4:00 PM	06/08/2013 upto 3:00PM 06/08/2013 3:30PM

The tender forms can be obtained from O/o Executive Engineer, UWD on payment of tender processing fee of Rs. 1000/- in form of Demand Draft in favour of Registrar, GGSIPU. Tender can also be downloaded from website [www.ipu.ac.in](http://www.ipu.ac.in) In case of downloaded tender, tender processing fee shall be paid alongwith the bid.

Eligibility documents i.e. Earnest Money, copy of pan card, VAT registration alongwith acknowledgement of VAT return of last quarter, copy of enlistment in appropriate class, tender cost in case tenders are downloaded should be placed in separate envelope marked "Eligibility Documents". Duly filled Tender document with financial bid shall be placed in other envelope marked "Tender Document with Financial bid". Both sealed envelopes shall be submitted together in another sealed envelope superscribed with name of work and due date of opening. The envelope marked "Tender with Financial Bid" of only those contractors shall be opened whose all eligibility documents are found to be in order.

Earnest money shall be in shape of Fixed Deposit receipt of a Scheduled Bank or Demand Draft of a scheduled Bank issued in favour of Registrar, GGSIPU. A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs.20 lacs, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee.

---sd---

**Executive Engineer  
University Works Division**

Copy to:

- 1) Div Accountant, GGSIPU
- 2) AE (C),UWD, GGSIPU
- 3) Server In charge, GGSIPU – With a request to upload on website

---sd---

**Executive Engineer**



# **GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY**

## **Tender Document**

Name of Work: A/A GGSIP University, Dwarka Campus,  
New Delhi

Sub Head: Construction of tennis and basketball  
Court.

**Executive Engineer (Civil)  
University Works Division  
Ground Floor, Library Block,  
GGSIPU, Sector- 16C, Dwarka,  
New Delhi – 110078  
Contact : 25302291**

Document Fee : Rs 1000.00 (Non-refundable)

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Sub Head: Construction of tennis and basketball Court.

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## ***NOTICE INVITING TENDER***

1. The Executive Engineer, University Works Division, on behalf of the GGSIPU invites Sealed Item Rate tenders from approved and eligible contractors of CPWD enlisted in appropriate class (Civil) for the work of:-

Name of Work:           A/A GGSIP University, Dwarka Campus, New Delhi

Sub Head:                Construction of tennis and basketball court.

The enlistment of the contractors should be valid on the last date of sale of tenders.

In case only the last date of sale of tender is extended, the enlistment of contractor should valid on the original date of sale of tenders.

In case both the last date of receipt of application and sale of tenders are extended, the enlistment of contractor should be valid on either of the two dates i.e. original date of sale of tender or on the extended date of sale of tenders.

2. The work is estimated to cost **Rs. 95,20,518/-**. This estimate, however, is given merely as a rough guide.
3. Agreement shall be drawn with the successful tenderer on prescribed Form No. C.P.W.D. 7/8 which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
4. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen in the office of the EE/UWD between hours of 11:00 AM & 4:00 PM from 25/07/2013 to 05/08/2013 everyday except on Sundays and Public Holidays. Tender is also available on website [www.ipu.ac.in](http://www.ipu.ac.in).
5. Desirous agencies may obtain tender document on request in writing from University Works Division, Ground Floor, Library Block, GGSIPU, Dwarka, New Delhi – 110078 on any working day between 1000 Hrs. (IST) to 1600 Hrs. (IST) up to **13/06/2013** on payment of non-refundable fee of **Rs.1000/- (Rupees One Thousand Only)** in the form of crossed Demand Draft drawn in favour of Registrar, GGSIPU payable at New Delhi. Tenders can also be downloaded from the website [www.ipu.ac.in](http://www.ipu.ac.in). In case of downloaded tenders, demand draft of **Rs. 1000/-** shall also be enclosed with the bid toward tender document cost in form of Demand Draft in favour of Registrar, GGSIPU payable at New Delhi.

Applications for issue of forms shall be received by 05/08/2013 (3:00 PM) and tender documents shall be issued by 05/08/2013 (4:00 PM)

6. Agencies fulfilling the above criteria mentioned at Sl. 1 may submit the tender documents along with Earnest Money **Rs. 1,90,410/- (Rupees One Lac Ninety**

**Thousand Four Hundred Ten only**) in the shape of fixed deposit receipt of a scheduled bank or demand draft of a scheduled bank issued in favour of Registrar, GGSIPU. **50%** of earnest money or **Rs.20,00,000/-**, whichever is less, will have to be deposited in the shape prescribed above and balance amount of the earnest money can be accepted in the form of Bank Guarantee issued by scheduled bank having validity of 6 months or more from the last date of receipt of tenders.

7. Eligibility documents i.e. Earnest Money, copy of pan card, VAT registration alongwith acknowledgement of VAT return of last quarter, copy of enlistment in appropriate class, tender cost in case tenders are downloaded should be placed in separate envelope marked "Eligibility Documents". Duly filled Tender document with financial bid shall be placed in other envelope marked "Tender Document with Financial bid". Both sealed envelopes shall be submitted together in another sealed envelope superscribed with name of work and due date of opening, which will be received by the EE/UWD upto 3.00 pm on -----\*----- and will be opened by him or his authorized representative in his office on the same day at 3.30 pm. The envelope marked " Eligibility Documents" shall be opened first and other envelope marked " Tender with Financial Bid" of only those tenderers shall be opened, whose eligibility documents are found to be in order.
8. The time allowed for carrying out the work will be **75 days** from the date of start as defined in Schedule 'F' or from the first date of handing over of site, whichever is later, in accordance with phasing, if any, indicated in the tender documents.
9. The site of work is available.
10. Last date for submission of tender document is 06/08/2013 **upto 15.00 Hrs.**
11. The Contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than **Rs.1,00,000/-**) or Fixed Deposit Receipts of any Scheduled Bank or in the form of an irrevocable bank guarantee bond of any scheduled nationalized bank in accordance with the form prescribed.
12. The description of the work is as follows:  
Name of work: A/A GGSIP University, Dwarka Campus, New Delhi  
  
Sub Head: Construction of tennis and basketball court.
13. Copies of other drawings and documents pertaining to the works will be open for inspection by the tenderers at the office of Executive Engineer, UWD. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves the form and nature of the site, the means of access to the site, the accommodation they may require and before submitting their tenders 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 & plants,

water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract document. Submission of a tender by tenderer implies that he has read this letter 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 GGSIPU and local conditions and other factors having a bearing on the execution of the work.

14. The competent authority on behalf of the GGSIPU does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without assigning any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
15. 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.
16. The competent authority on behalf of GGSIPU 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.
17. The Contractor shall not permitted to tender for works in the UWD responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). 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 in the GGSIPU. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
18. The tender for the works shall remain open for acceptance for a period of (90) Ninety days from the date of opening of tenders/ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelope system. 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 GGSIPU, then the GGSIPU shall, without prejudice to any other right or remedy, be at liberty to forfeit **50%** of the said earnest money as aforesaid. Further, the tenderer shall not be allowed to participate in the re tendering process of the work.
19. This notice inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on issue of letter of Commencement of work by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:
  - a) Notice inviting tender, Tender document including Schedule of Quantities, Contract clauses, Special conditions, particular specifications and drawings, if any, forming part of the tender document as issued at the time of invitation of



tender and acceptance thereof together with any correspondence leading thereto.

- b) Standard Contract form 7/8 of 2010 with correction slips upto date of receipt of tender.
- c) Integrity Pact.

20. The GGSIPU reserve the right to reject any or all prospective applications without assigning any reason and to restrict the list of contractors to any number deemed suitable by it.

**Executive Engineer (Civil)  
University Works Division**

## **INTEGRITY PACT**

To,

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Sub: NIT No. 14/SE/UWD/2013-2014 for the work A/A GGSIP University, Dwarka Campus, New Delhi Sub Head: Construction of tennis and basketball court.**

Dear Sir,

It is here by declared that GGSIPU is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the GGSIPU.

Yours faithfully

Executive Engineer  
(University Works Division)

## **INTEGRITY PACT**

To,

Executive Engineer,  
University Works Division  
GGSIU, Sector- 16C, Dwarka,  
New Delhi – 110078

Sub: Submission of Tender for the work of

Name of work: A/A GGSIP University, Dwarka Campus, New Delhi

Sub Head: Construction of tennis and basketball court.

Dear Sir,

I/We acknowledge that GGSIPU is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed Integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that **THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE** of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by GGSIPU. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, GGSIPU shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours Faithfully

(Duly authorized signatory of the Bidder)

## **INTEGRITY PACT**

### **INTEGRITY AGREEMENT**

THIS Integrity Agreement is made at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

#### **BETWEEN**

GGSIPIU represented through Executive Engineer, UWD, (Hereinafter referred as the **'Principal/Owner'**, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns )

#### **AND**

\_\_\_\_\_ through \_\_\_\_\_ (Hereinafter referred as the **'Bidder/Contractor'** and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

#### **Preamble**

WHEREAS the Principal/Owner has floated the Tender (NIT No. 14/SE/UWD/2013-2014) (hereinafter referred to as **"Tender/Bid"**) and intends to award, under laid down organizational procedure, contract for Name of work: A/A GGSIP University, Dwarka Campus, New Delhi. Sub Head: Construction of tennis and basketball court. hereinafter referred to as the **"Contract"**.

And WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement(hereinafter referred to as **"Integrity Pact"** or **"Pact"**), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants in this pact, the parties hereby agree as follows and this pact witnesses as under:

#### **Article 1: Commitment of the Principal/Owner**

- 1) The Principle/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

- b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

**Article 2: Commitment of the Bidder(s)/Contractor(s)**

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government/Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The binder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will; not use improperly;, ( for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of other and/or to influence the procurement process to the detriment of the Government interests.**
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

### **Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach or this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**

- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1) the principal/owner apart from exercising any legal right that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

#### **Article 4: Previous Transgression**

- i) The bidder declares that no previous transgressions occurred in the last 5 year with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- ii) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
- iii) If the Bidder/Contractor can prove that he has resorted/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

#### **Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors**

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation (s) of the principles laid down in this agreement/Pact by any of its Sub-contractor/Sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

#### **Article 6: Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, GGSIPU.

**Article 7: Other Provisions**

- 1) This pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Division** of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement/Pact or any action taken by the Owner/Principal in accordance with this **Integrity agreement /pact interpretation thereof shall not be subject to arbitration.**

**Article 8: Legal and Prior Rights**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contract documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHERE OF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

\_\_\_\_\_  
(For and on behalf of Principal/Owner)

\_\_\_\_\_  
(For and on behalf of Bidder/Contractor)

WITNESSES:

1. \_\_\_\_\_
2. \_\_\_\_\_

Place:  
Dated:



## Item Rate Tender

(A) Tender for work of A/A GGSIP University, Dwarka Campus, New Delhi

**Sub Head:** Construction of tennis and basketball court.

- i) To be submitted by **15.00 Hrs hours up to** 06/08/2013 to Executive Engineer. UWD, Ground Floor, Library Block, GGSIPU, Sector-16C, Dwarka, New Delhi-110078
- ii) To be opened in presence of tenderers who may be present at **15.30 hours on** - 06/08/2013 in the office of **Executive Engineer**, UWD, Ground Floor, Library Block, GGSIPU, Sector-16C, Dwarka, New Delhi-110078

Issued to -----

Signature of officer issuing the documents -----

Designation -----

Date of Issue -----

### T E N D E R

I/ We have read and examined the Notice inviting tender, specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special condition, particular Specification, Schedule of Quantities & 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 GGSIPU 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.

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

The earnest money of **Rs.** \_\_\_\_\_/- has been deposited in the shape of fixed deposit receipt of a scheduled bank/ demand draft of a scheduled bank/bank guarantee of scheduled bank issued in favour of Registrar, GGSIPU. If I/we, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said GGSIPU or his successors 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 work as specified, I/we agree that GGSIPU 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 and 12.3 of the clauses of contract. 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 retendering 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 authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Date -----

Signature of Contractor  
Postal Address

Witness :

Address :

Occupation :

### A C C E P T A N C E

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

The letters referred to below shall form part of the Agreement :

- a)
- b)
- c)

**Executive Engineer (Civil),  
University Works Division**

**GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY  
SECTOR-16C, DWARKA, NEW DELHI-110078**

1. Notice Inviting Tender will state the work to be carried out, as well as the date for submission and opening of tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited at the time of purchase of tender. The performance Guarantee to be deposited by the successful tenderer and the amount of security deposit to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours.
2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
3. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm.
4. In case of items rate tender, any person who submits a tender shall fill up the Schedule of Quantity form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort, including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tenders for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.
- 4A In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in schedule of quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:
  - (i) The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender.
  - (ii) The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.
  - (iii) The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender:Tenderers which propose any alteration in work specified in the said form of invitation of tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily

rejected. No single tender shall include more than one work, but contractor who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of of the works to which they refer, written on the envelops.

4B: In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/ sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal, the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE, UWD, EE(s) in-charge of major & minor component (s) (also DDH in case Horticulture work is also included in the tender), EE(P) or EE(HQ) of the circle & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest, contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor.

Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.

5. The officer inviting tender or his duly authorized representatives, will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money forwarded at the time of purchase of tender shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other documents mentioned in Rule-I. In the event of a tender being rejected, the earnest money of unaccepted tenders shall thereupon be returned to the contractor, without any interest.
6. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
7. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgement or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
8. The memorandum of work tendered for and the schedule of materials to be supplied by the department and their issue rates, shall be filled and completed in the office of the officer inviting tender before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.

9. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender documents drawings or other records connected with the work given to them.
- 9A. Use of correction fluid, anywhere in tender document is not permitted. Such tender is liable for rejection.
10. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender Containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
- 10A. In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy.
11. In the case of any tender where unit rate of any item/ items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
12. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
- 12A. In Percentage Rate Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P' and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.

13.
  - i) The contractor whose tender is accepted shall be required to deposit an amount equal to 5% of the tendered value of the work as performance guarantee within the period as specified in schedule-‘F’ in the form of an irrevocable bank guarantee bond of any scheduled bank in accordance with the form prescribed, fixed deposit receipt or demand draft in favour of Registrar, GGSIPU.
  - ii) The contractor whose tender is accepted, will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the tendered value of the work. The Security deposit will be collected by deductions from the running bills of the contractor at the rate of 5% and the earnest money deposited at the time of tenders, will be treated as a part of the Security Deposit. The Security amount will also be accepted in the shape of Fixed Deposit Receipt of a Scheduled Nationalized Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed.
14. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
15. 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 GGSIPU will not entertain any claim whatsoever in respect of the same.
16. The contractor shall give a list of both gazetted and non-gazetted GGSIPU employees related to him.
17. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
18. The tender for composite work includes, in addition to building work, all other works such sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.
19. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the GGSIPU may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

**CONDITIONS OF CONTRACT****Definitions**

1. The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the GGSIPU and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
2. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:
  - i) The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
  - ii) The Site shall mean the land/ or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work, is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
  - iii) The Agency / Contractor / Tenderer shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assigns of such individual, firm or company.
  - iv) The GGSIPU means the Guru Gobind Singh Indraprastha University and his successors.
  - v) The Engineer-in-Charge means the Executive Engineer UWD
  - vi) Accepting Authority shall mean the authority mentioned in Schedule 'F'.
  - vii) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.

- viii) Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.
- ix) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
- x) Department means Guru Gobind Singh Indraprastha University or authorized by GGSIPU to work on their behalf.
- xi) District Specifications means the specifications followed by the State Government in the area where the work is to be executed.
- xii) Tendered value means the value of the entire work as stipulated in the letter of award.

### **Scope and Performance**

- 3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
- 4. Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
- 5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, Schedule of Rates and such other printed and published documents, together with drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

### **Works to be carried out**

- 6. The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule-A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

### **Sufficiency of Tender**

- 7. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices



quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

### **Discrepancies and Adjustment of Errors**

8. The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.

8.1 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) Description of items given in Schedule of Quantities.
- ii) Technical Specification and Special Conditions if any.
- iii) Drawings.
- iv) C.P.W.D. Specifications.
- v) Indian Standard Specifications of B.I.S.
- vi) Decision of Engineer-in-Charge.

8.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

8.3 Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

9. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:-

- i) The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- ii) Standard C.P.W.D. Form as mentioned in Schedule 'F' consisting of:
  - (a) Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.
  - (b) C.P.W.D. Safety Code.
  - (c) Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD or its contractors.
  - (d) CPWD Contractor's Labour Regulations.
  - (e) List of Acts and omissions for which fines can be imposed.
- iii) No payment for the work done will be made unless contract is signed by the contractor

## **Form of Performance Security (Guarantee) Bank Guarantee Bond**

1. In consideration of the Guru Gobind Singh Indraprastha University (hereinafter called “The University”) 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 a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and condition in the said agreement.

We, ----- (hereinafter referred as “the Bank”) hereby undertake to  
(indicate the name of the Bank)  
pay to the University an amount not exceeding Rs.----- (Rupees -----  
----- only) on demand by the University.

2. We, ----- do hereby undertake to pay the amounts due and  
(indicate the name of the Bank)  
payable under this guarantee without any demure, merely on a demand from the University 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 the University 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 University 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 University 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 University that the University  
(indicate the name of the Bank)  
shall have the fullest liberty without our consent and without affecting in any manner our obligation 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 University 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 University or any indulgence by the University 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 the Bank)  
with the previous consent of the University in writing.
8. This guarantee shall be valid upto ----- unless extended on demand by the University. 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 ----- (indicate the name of the Bank)

Signature & Seal of Bank

## FORM OF EARNEST MONEY (BANK GUARANTEE)

WHEREAS, contractor ..... (Name of contractor) hereinafter called “the contractor”) has submitted his tender dated.....(date) for the construction of ..... (name of work) (hereinafter called “ the Tender”)

KNOW ALL PEOPLE by these presents that we ..... (name of bank) having our registered office at ..... (hereinafter called “the Bank”) are bound unto ..... (Name and sub division of Executive Engineer) (hereinafter called “the Engineer-in-Charge”) in the sum of Rs..... (Rs. In words.....) for which payment well and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this..... day of .....20...

THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws his tender during the period of validity of tender (including extended validity of tender) specified in the Form of tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
  - a) fails or refuses to execute the Form of agreement in accordance with the instructions to contractor, if required; OR
  - b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and instructions to contractor, OR
  - c) fails or refuses to start the work, in accordance with the provisions of the contract and instructions to contractor, OR
  - d) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

The Guarantee will remain in force up to and including the date\*.....  
after the deadline for submission of tender as such deadline is stated in the instructions to  
contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s)  
to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the  
Bank not later than the above date.

**DATE.....**

**SIGNATURE OF THE**

**SEAL**

**BANK**

**WITNESS.....**

**(SIGNATURE, NAME AND ADDRESS**

\* Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

## PROFORMA OF SCHEDULES

(Operative Schedules to be supplied separately to each intending tenderer)

### SCHEDULE 'A'

Schedule of quantities - Page 54 to 58

### SCHEDULE 'B'

Schedule of materials to be issued to the contractor. NIL

### SCHEDULE 'C'

Tools and plants to be hired to the contractor : NIL

### SCHEDULE 'D'

Extra schedule for specific requirements/ document for the work, if any. - NIL

### SCHEDULE 'E'

Reference to General Conditions of contract.

Name of Work: A/A GGSIP University, Dwarka Campus, New Delhi

**Sub Head:** Construction of tennis and basketball court.

Estimated cost of work : **Rs. 95,20,518/-**

- |                             |                             |
|-----------------------------|-----------------------------|
| i) Earnest money :          | <b>Rs. 1,90,410/-</b>       |
| ii) Performance Guarantee : | <b>5% of tendered value</b> |
| iii) Security Deposit :     | <b>5% of tendered value</b> |

### SCHEDULE 'F'

General Rules & Directions:

Officer Inviting Tender : Executive Engineer UWD, GGSIPU

#### Definitions:

- |  |   |
|--|---|
| 2(v) Engineer-in-Charge  | Executive Engineer UWD, GGSIPU                                    |
| 2(viii) Accepting Authority  | Superintending Engineer, UWD, GGSIPU                              |
| 2(x) Percentage on cost of materials and labour to cover all overheads and profits | 15%   |
| 2(xi) Standard Schedule of Rates   | DSR 2012 with up-to-date correction slips                         |
| 2(xii) Department  | GGSSIPU   |
| 9(ii) Contract Form  | CPWD Form 7/8 as modified up to date of Date of receipt of tender |

#### Clause 1

- |  |               |
|--|---------------|
| i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance, in days                      | <b>7 days</b> |
| ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above | <b>5 days</b> |

**Clause 2**

Authority for levy compensation  
Under clause 2.

**Superintending Engineer, UWD, GGSIPU**

**Clause 2A**

Whether Clause 2A shall be applicable

**No**

**Clause 5**

Number of days from the date of issue  
of letter of acceptance for reckoning date  
of start

**12 days**

**Table of mile stones**

<b>S.no</b>	<b>Description of milestone (Physical)</b>	<b>Time allowed in days from date of start</b>	<b>Amount to be withheld in case of non achievement of mile stone</b>
<b>1</b>	<b>Preparation of sub grade include supply and stacking of stone aggregate.</b>	<b>15 days</b>	<b>1% of tendered amount</b>
<b>2</b>	<b>Laying WBM.</b>	<b>30 days</b>	<b>1% of tendered amount</b>
<b>3</b>	<b>Laying VDC and DBM include Bituminous Concrete.</b>	<b>45 days</b>	<b>1% of tendered amount</b>
<b>4</b>	<b>Laying sports surface and completion of work.</b>	<b>75 days</b>	<b>1% of tendered amount</b>

Time allowed for execution of work.

**75 days.**

Authority to decide

- i) Extension of time
- ii) Rescheduling of milestones
- iii) Shifting of date of start in case of delay in handing over of site

**Superintending Engineer,UWD,GGSIPU**

**Clause 6 or 6 A**

Clause Applicable

**6A**

**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

**Rs. 15 lakh**

**Clause 10 A**

List of testing equipment to be provided at site

**Seives, Measuring Tapes, Weighing Machine, Cube mould (2 set), slump cone, measuring flask, Digital Levelling Instrument, Temperature meter, field testing equipment for sports surface and bituminous road work as per specifications.**

**Clause 10 B(ii)**

Whether clause 10B(ii) is applicable

**No**

**Clause 10 C**

Component of labour expressed as percent of value of work

**Not Applicable**

**Clause 10 CA**

**Not Applicable**

**Clause 10 CC**

Clause 10CC to be applicable in contracts with Stipulated period of completion exceeding the Period shown in next column

**Not Applicable**

Schedule of component of other materials, labour, POL etc for price escalation

Component of Civil (except for materials covered under clause 10CA) / Electrical construction materials expressed as percent of total value of work

\_\_\_NA\_\_\_\_\_

Component of labour expressed as percent of total value of work

\_\_\_NA\_\_\_\_\_

Component of POL expressed as percent Of total value of work

\_\_\_NA\_\_\_\_\_

**Clause 11**

Specifications to be followed for execution of work

CPWD specification 2009 with correction slips upto date of receipt of tender

**Clause 12**

**Type of Work**

**Original**

12.2 & 12.3

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work

30%

12.5

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for foundation work

100%

**Clause 16**

Competent Authority for deciding reduced rates

**Superintending Engineer, UWD,GGSIPU**

**Clause 18**

List of mandatory machinery tools & plants To be deployed by the contractor at site

**Road, Roller, Paver Finisher, Vacuum dewatering machine and other equipments as required for completion of work within time period**

**Clause 25**

Constitution of Dispute Redressal committee

Chairman- Registrar, GGSIPU  
Member-I, SE, UWD  
Member-II, Technical Expert appointed by Hon'ble VC

**Clause 36(i)**

Requirement of Technical representative(s) and recovery rate

S.No.	Requirement	Qualification	Rate of Recovery
1	Engineer(civil)	Graduate in Civil Engg. with 5 years experience.	Rs 35,000/- per month



**Clause 42**

(i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen of the basis of Delhi Schedule of Rates 2012 printed by C.P.W.D

(ii) Variations permissible on theoretical quantities.

(a) Cement

For works with estimated cost put to tender not more than Rs. 5 Lakhs.

3% plus/minus

For works with estimated cost put to tender more than Rs. 5 Lakhs.

2% plus/minus

(b) Bitumen All works

2.5% plus only & nil on minus side.

(c) Steel Reinforcement and structural steel sections for each diameter, section and category

2 plus/minus

(d) All other materials

Nil

**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 beyond the permissible variation
1.	Cement	NIL	Rs. 5300/- per MT.
2.	Steel Reinforcement		
	i) Primary Manufacture	NIL	Rs.50,865/- per MT.
	ii) Secondary Manufacture or ISPs	NIL	Rs.44,520/- per MT.

**Superintending Engineer  
GGSIPU**

# **Special Conditions**

## **Special Conditions**

- 1.0 “CPWD Specifications” wherever appearing in this document would mean Latest edition of CPWD specifications with correction slips issued upto the last date of receipt of tender.
- 2.0 GCC 2010 referred in this document is Govt of India Publication and is available in the market.
  - a) In CPWD Form 7/8, General Rules and Directions and Conditions of Contract forming part of ‘GCC 2010’ shall be superceeded by this document.
  - b) Wherever “President of India” is appearing in the GCC 2010 same shall be read as GGSIPU.
  - c) Wherever Superintending Engineer or Chief Engineer is appearing in GCC 2010, it may be read as Superintending Engineer/Administrative Head GGSIPU or Chief Engineer/Administrative Head GGSIPU.
  - d) Wherever CPWD or PWD is appearing in GCC 2010, it may be read as GGSIPU.
- 3.0 Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all-inclusive and shall apply to all heights, levels, depths, leads, lifts including shafts, machine room & stair cases. The rates for all items of work, unless clearly specified otherwise, shall include the cost of all labour, materials, and other inputs involved in the execution of the items.
- 4.0 No foreign exchange shall be made available by the department for the purpose of procurement of equipment, plants, machinery, materials of any kind or any other items required to be carried out in execution of work.
- 5.0 The contractor or his authorized representative should always be available at the site of work to take instructions from Engineer in charge, and ensure proper execution of work.
- 6.0 No work shall commence in the absence of contractor’s engineers and they shall certify in writing about the correctness of layout alignment and shall ensure stability of all structural work such as partition panel and other related items.
- 7.0 All work and materials brought and left upon the ground by the contractor or by his orders for the purpose of forming part of the works, are to be considered to be the property of the GGSIPU and the same are not to be removed or taken away by the contractor or any other person without consent in writing of the Engineer-in-charge but the GGSIPU is not to be in any way responsible for any loss or damage which may happen to or in respect of any such work or materials either by the same being lost or damaged by weather or otherwise.
- 8.0 The contractor shall execute the different items simultaneously, as far as possible, so that minimum breakage and repairs are involved.
- 9.0 The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of

environment and waterways. He shall make good at his own cost and to the satisfaction of the Engineer-in-Charge, any damage to public or private property whatsoever caused by the execution of the work or by traffic brought thereon by the contractor. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants/users of adjoining buildings.

- 10.0 All associated activities required for obtaining necessary clearances, permissions, approvals, all licenses etc. as required from all concerned authorities in respect of installation and commissioning shall be the responsibility of the contractor, the cost for which shall be deemed to be included in the rates for various items of work of Schedule of Quantities. However, actual statutory fee paid to the concerned authorities for obtaining approvals if any, shall be reimbursed by the University on production of proof of payment made by the Contractor.
- 11.0 The contractor shall be responsible for watch and ward of all the works, equipment and various materials till complete handing over of works.
- 12.0 Wherever any reference to any Indian Standards Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued there to or revisions there of if any, upto the date of receipt of tenders.
- 13.0 The site of work may be at one or more places within the campus and at any floor upto six levels for which nothing extra shall be paid.
- 14.0 Cess @ 1% of gross value of work done shall be deducted from the payment as per Delhi Building & other Construction Workers Welfare Cess Act 1996 besides other statutory deduction like income tax, VAT etc.
- 15.0 The contractor shall be fully responsible for rectifying the defect, which may happen during the use up to 12 months from the date of completion of the work. The decision of Engineer-in-Charge in this regard shall be final & binding. In case the contractor fails to carry out the said repairs, rectifications, replacement within the specified time, the department shall get the repairs / rectifications / replacement as considered necessary at the cost of the contractor by recovering the cost from the security deposit. In case additional expenditure is incurred by the department on this account, the same shall be borne by the contractor.
- 16.0 The rates quoted by the contractor shall be all inclusive keeping in mind the specifications, special conditions and technical specifications and nothing extra shall be payable whatsoever, unless otherwise specified.
- 17.0 If the work is carried out in more than one shifts or during night to meet the time period of completion, nothing extra shall be paid on this account.
- 18.0 Contractor shall have to make own arrangement for water & electricity, otherwise 1% of gross amount shall be deducted from the dues of the contractor.
- 19.0 The contractor shall follow the instruction and restrictions imposed by the Administration / Police authorities on the working and movement of labour / material / vehicles etc and nothing extra shall be paid on this account.
- 20.0 All the materials are to be got approved from the Engineer-in-Charge before using the same in the work.

## **21.0 Special conditions for cement**

- 21.1 The contractor shall procure 43 grade ordinary Portland cement conforming to IS 8112/Portland Pozzolana Cement conforming to IS:1489 (Part-I) as required in the work, from reputed manufacturers of cement such as ACC, Ultratech, Vikram, Shree Cement, Ambuja, Jaypee Cement, Century Cement & J.K. Cement or from any other reputed cement Manufacturer having a production capacity not less than one million tonnes per annum as approved by ADG for that sub region.

The tenderers may also submit a list of names of cement manufacturers which they propose to use in the works. The tender accepting authority reserves right to accept or reject name(s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer, fully or partially. The supply of cement shall be taken in 50 kg. bags bearing manufacturer's name and ISI marking. 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. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected, and it 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.

- 21.2 The cement shall be brought at site in bulk supply of approximately 10 tonnes or as decided by the Engineer- in- charge. The cement godown of the capacity to store a minimum of 500 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
- 21.3 Double lock provision shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-Charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
- 21.4 The cement shall be got tested by the Engineer-in-charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. 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 cement does not conform to relevant BIS codes.
  - (b) By the Department, if the results show that the cement conforms to relevant BIS codes.
- 21.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of 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 conditions laid therein. In case the cement consumption is less than theoretical consumption including permissible variation, recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to made.

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

21.7 The damaged cement shall be removed from the site immediately by the contractor on receipt of a notice in writing from the Engineer-in-charge. If he does not do so within 3 days of receipt of such notice, the Engineer-in-charge shall get it removed at the cost of the contractor.

## **22.0 Special conditions for steel**

22.1 "The contractor shall procure TMT bars of Fe500 grade from primary steel producers such as SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power Ltd. and JSW Steel Ltd. or any other producer as approved by CPWD who are using iron ore as the basic raw material/input and having crude steel capacity of 2.0 Million tonnes per annum and above.

In case of non-availability of steel from primary producers TMT reinforcement bars can be procured from steel producers having Integrated Steel Plants (ISPs) using iron ore as the basic raw material for production of crude steel which is further rolled into finished shapes in-house having crude steel capacity of 0.5 Million tonne per annum and more. The TMT bars procured from Primary Producers and ISPs shall conform to manufacture's specifications. The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be. TMT bars procured either from Primary Producers, ISPs or secondary producers, the specifications shall meet the provisions of IS 1786:2008.

In case of non-availability of steel from Primary Producers as well as ISPs TMT reinforcement bars can be procured from secondary producers. The secondary producers must have valid BIS licence to produce HSD bars conforming to IS 1786 : 2008. In addition to BIS licence, the secondary producer must have valid licence from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.

22.2 The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. The contractor shall submit original vouchers from the manufacturer for the total quantity of steel supplied under each consignment to be incorporated in the work. All consignment received at the work site shall be inspected by the Site staff along with the relevant documents before acceptance. The contractor shall obtain Original Vouchers and Test Certificates and furnish the same to the Engineer-in-Charge in respect of all the lots of steel brought by him from approved supplier to the site of work. The original vouchers and test certificates shall not be defaced by the Site staff and kept on record in the site office.

22.3 Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para 22.1 4above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

- 22.4 The steel reinforcement bars shall be brought to the site in complete as per design or as decided by the Engineer-in-charge.
- 22.5 The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 22.6 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

<b>SIZE OF BAR</b>	<b>FOR CONSIGNMENT BELOW 100 TONNES</b>	<b>FOR CONSIGNMENT OVER 100 TONNES</b>
Under 10 mm dia	One sample for each 25 tonnes or part thereof.	One sample for each 40 tonnes or part thereof
10 mm to 16 mm dia	One sample for each 35 tonnes or part thereof.	One sample for each 45 tonnes or part thereof
Over 16 mm dia	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes or part thereof

- 22.7 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor.
- 22.8 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.
- 22.9 The steel brought to site and the steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.
- 22.10 The actual issue of steel shall be actual weight of total quantity of Steel received at the site less actual weight of balance quantity of steel lying unutilized at the work site. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.
- 22.11 In case the contractor is permitted to use TMT reinforcement bars procured from ISPs or secondary producers then
- i) The rate of providing & laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced by Rs 7.30 per kg.

Surplus quantity of steel, if any, after completion of the work shall be removed from the site by the contractor at his own cost after approval of the Engineer-in- Charge.

- 22.12 Reinforcement including authorized spacer bars and lappings shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimeter. Wastage and unauthorized overlaps shall not be measured.
- 22.13 The standard sectional weights referred to as in Table IV in para 5.3.3 in CPWD Specifications for works 2009 will be considered for conversion of length of various sizes of M.S. Bars, Tor Steel Bars and T.M.T.bars into Standard Weight.
- 22.14 Records of actual Sectional weights shall also be kept dia-wise and lot-wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer-in-Charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight.
- 22.15 If the Derived Weight as in sub-para above is less than the Standard Weight then the Derived Actual Weight shall be taken for payment. If the Derived Actual Weight is found more than the Standard Weight, the Standard Weight shall be taken for payment. In such case nothing extra shall be paid for the difference between the Derived Actual Weight and the standard Weight.

### **23.0 Conditions for Structural Steel**

- 23.1 The scope of work for the contractor in respect of structural steel work shall cover, but shall not be limited to the following:
- A. Preparation of complete detailed shop fabrication drawings based on the design drawings for approvals, required for all the permanent structures.
  - B. Submission of revised design, with calculations and detailed fabrication drawings, in case any substitution of the designed sections is required.
  - C. Submission and getting approval of shuttering, staging and scaffolding details.
  - D. Procurement and testing of all raw structural steel materials in lots for fabrication taking into account wastage margin etc.
  - E. Providing all materials, labour, tools & plant and equipments and all types of consumables required for fabrication.
  - F. Fabrication of the steel works in accordance with the approved fabrication drawings, including all shop assembling, matching and marking. Design, manufacture/fabrication and provision of all jigs, fixings, manipulators etc. required for the fabrication are to be included in item.
  - G. To submit erection plan showing a methodology & procedure for erection compatible with the details of fabrication. Also complete drawings & phase wise instructions for all the activities required to erect steel structure in final position, shall be submitted.



- H. Complete erection of the structural steelwork. The contractor shall ensure the presence of the qualified and experienced erection Engineer during complete erection work at site.
- I. All major/ minor modifications of the fabricated steel structures, as directed by the Engineer-in-charge, including but not limited to the following:
- i) Removal of bends, kinks, twists etc. for parts damaged during transportation and handling.
  - ii) Cutting, chipping, filling, grinding etc. if required or preparation and finishing of site connections.
  - iii) Reaming of holes for use of higher size bolt if required.
  - iv) Re-fabrication of parts damaged beyond repair during transport and handling or re-fabrication of parts which are incorrectly fabricated.
  - v) Fabrication of parts omitted during fabrications by error, or subsequently found necessary.
  - vi) Drilling of holes which are either not drilled at all or are drilled in incorrect location during fabrication.
  - vii) Carry out tests in accordance with the related Specification which will be inspected by Engineer-in-charge.
  - viii) Touch up for the paints damaged during transportation / handling and final finish coat on the structure as per specification.
  - ix) Details of erection equipment machinery including capacity & specifications, tools, tackles etc. to be used for erection purpose.
  - x) Necessary formwork & staging required for erection of structural steel work including design of formwork for all the anticipated loads.
  - xi) All procedures and tests on welds as per specifications and welded parts to ensure the strength requirements of joints.

23.2 Design drawings shall be furnished to the contractor and all such drawings shall form part of these Specifications. The availability of structural member mentioned in design drawings may be checked and if not available may be brought under notice of Engineer in charge.

23.3 The Engineer-in-charge reserves the right to make changes in the design drawings even after release for preparation of shop drawings to reflect addition, omission & modifications in data/details and requirements. Contractor shall consider such changes as part of these Specifications and the contract, and no extra claims shall be entertained on this account.

23.4 The details of connection, cuts, gusset plate shapes notches, bends shall be shown in fabrication drawings. In case of variations in design drawings and specifications, the decision of the Engineer-in-charge shall be final. Should the contractor, find any

discrepancy in the information furnished to him, same shall be immediately brought to the notice of Engineer-in-charge for resolution. The contractor shall obtain clarifications on discrepancies from Engineer-in-charge before proceeding with the work.

- 23.5 No fabrication work shall be started by the contractor without approval of Engineer-in-charge on the relevant drawings. Approval by the Engineer-in-charge of any of the drawings shall not relieve the contractor of his responsibility of workmanship, fit of parts, details, materials and errors or omissions of any work.
- 23.6 The contractor shall furnish four prints of shop drawings as advance drawing (for approval) and eight prints of all approved final shop drawings along with soft copy on CD for field use and record purpose. The drawings prepared by the Contractor, and all subsequent revisions thereof shall be at the cost of the Contractor, and no separate payments shall be made for the same. Revisions shall incorporate all modifications, field changes, substitutions etc. effected. The rates/prices quoted for steel work item shall be deemed to include the cost of such drawing work.
- 23.7 All materials to be supplied by the Contractor shall conform to relevant Indian Standards as approved by the Engineer-in-charge. Steel materials required for the work shall be free from imperfections, mill scales, slag intrusions, laminations, pittings, rusts etc. that may impair strength, durability and appearance. All materials shall be of tested quality only. Test Certificates in respect of each consignment shall be submitted to Engineer-in-charge before use in work. Whenever the materials are permitted for procurement from identified stocks, a random sample shall be tested at an approved laboratory, as directed by the Engineer-in-charge.
- 23.8.1 Structural steel conforming to IS:2062 : Grade B- Fe 410 (yield strength=240 MPa shall be used for main members of girder structures, cross girder members, bracings, gussets plates etc. Tubes shall conform to IS. : 1161.

## **Condition for Sports Surface**

### **FOR NEW OR EXISTING ASPHALT SURFACES**

#### ***Scope***

This Installation Guideline is intended as a general reference to describe product usage and construction techniques which will tend to provide an evenly textured, color surface for new or existing hot mix asphalt pavement tennis courts or recreational surfaces.

### **1.0 SURFACE PREPARATION**

#### **1.1 Base Construction**

Surface must meet or exceed the American Sports Builders Association (ASBA) applicable Guidelines.

#### **1.2 Substrate Curing Requirements**

New hot-mix asphalt surfaces must be allowed a minimum of 14 days cure time before application of Surfacing products.

#### **1.3 Crack Filling**

The surface must be smooth, free of dirt, loose or flaking paint, oily materials or chemical residues, vegetation of any sort and any other debris or foreign matter that may prevent the proper product adhesion. Thoroughly rout existing cracks of dirt, debris and loose impediments. Cracks should be blown clean with an air compressor. After cleaning, apply Deco Crack Filler 64061 or equivalent to fill cracks.

#### **1.4 Surface Imperfections**

Before the application of surface products, the court surface shall be flooded with water and allowed to drain. Any depressions capable of submerging a U.S. five-cent piece after one hour should be marked with chalk, not crayon or a grease pencil. These areas must be allowed to thoroughly dry. Once dried, apply Acrylic Patch Binder 920-39 or equivalent to the marked area.

#### **1.5 Priming**

Priming of asphalt surfaces is only necessary if existing asphalt is too badly weathered to establish a strong bond with the Acrylic Resurfacer.

### **2.0 REQUIRED MATERIAL FOR DecoColor on Asphalt**

*Deco Crack Filler 64061 or equivalent*

*Acrylic Patch Binder 920-39 or equivalent*

*Acrylic Resurfacer 920-29 or equivalent*

*DecoBase I 920-05 or equivalent*

*DecoColor MP Classic 920-27 or equivalent*

*White Line Paint 920-22 or equivalent*

### **3.0 APPLICATION OF ACRYLIC RESURFACER 920-29 OR EQUIVALENT**

1-2 coats of Acrylic Resurfacer 920-29 or equivalent shall be applied prior to the application of any Deco or equivalent Surfacing System. The undiluted coverage rate for Acrylic Resurfacer is approximately 0.06 gallons per square yard, per application.

#### **3.1 Mixing Instructions**

The following mix has been found to be satisfactory for average surface conditions:

Acrylic Resurfacer 920-29	55	gallons	30 gallons
Silica Sand (60 - 80 mesh)	600 - 900 lbs.	325 - 400 lbs.	
Clean potable water	20-40 gallons	11- 22 gallons	

**Do not use sand containing clay, silt, ferrous metals or salt.**

Thorough mixing is required. A mechanical mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application. In very warm conditions more water may be added.

### **3.2 Installation**

Using a 50-70 durometer flexible rubber squeegee, apply Acrylic Resurfacer or equivalent mix parallel to one of the sides of the surface area. Care should be taken not to leave ridges where adjoining applications overlap. Under hot conditions, application is improved by keeping surface damp with a fine mist water spray. Never allow water to pool on the surface.

### **3.3 Drying and Cure Time**

Acrylic Resurfacer must be allowed to cure a minimum of 2 hours before applying additional acrylic coatings, assuming 70°F temperatures and 50% relative humidity. Low temperatures and high humidity will increase drying time dramatically.

### **4.0 APPLICATION OF DECOTURF II 920-30 Course or Equivalent**

Three (3) applications are the minimum required prior to the application of DecoBase II. The undiluted coverage rate for DecoTurf II is approximately 0.16 gallons per square yard, per application. Additional coats of DecoTurf II may be installed to increase resiliency.

#### **4.1 Mixing Instructions**

The following mixes have been found to be satisfactory for average surface conditions:

DecoTurf II® 920-30	55 gallons
Clean potable water	10 - 12 gallons

Thorough mixing is required. A mechanical mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application. In very warm conditions more water may be added.

#### **4.2 Installation**

Using a 50 durometer flexible rubber squeegee or approved spray apparatus, apply the DecoTurf II mix parallel to one of the sides of the surface area. Care should be taken not to leave ridges where adjoining applications overlap. Application in hot conditions is improved by keeping surface damp with a fine mist water spray. Do not allow the spray to puddle. When the first application has cured the next coat should be installed at 90° to the previous application.

#### **4.3 Drying and Cure Time**

Before re-coating, each application of DecoBase II must be allowed to fully cure. Under optimum installation conditions (70°F temperatures and 50% relative humidity), a maximum of two coats per day can be installed.

### **5.0 APPLICATION OF DECOBASE II 920-06 COURSE or Equivalent**

Two (2) applications are the minimum required over DecoTurf II, however additional coats may be installed to increase resiliency and surface consistency. The undiluted coverage rate for DecoBase II is approximately 0.10-0.12 gallons per square yard, per application.

#### **5.1 Mixing Instructions**

The following mixes have been found to be satisfactory for average surface conditions:

DecoBase II 920-06	55 gallons
Clean potable water	10 - 12 gallons

Thorough mixing is required. A mechanical mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application. In very warm conditions more water may be added.

### **5.2 Installation**

Using a 50 durometer flexible rubber squeegee or approved spray apparatus apply the DecoBase II mix parallel to one of the sides of the surface area. Care should be taken not to leave ridges where adjoining applications overlap. Application in hot conditions is improved by keeping surface damp with a fine mist water spray. Do not allow the spray to puddle. When the first application has cured the next coat should be installed at 90° to the previous application.

### **5.3 Drying and Cure Time**

Before re-coating, each application of Deco Base II must be allowed to fully cure. Under optimum installation conditions (70°F temperatures and 50% relative humidity), a maximum of two coats per day can be installed.

## **6.0 APPLICATION OF DECOCOLOR TEXTURE COURSE OR EQUIVALENT**

The DecoColor surfacing system consists of two distinct components, DecoBase I acrylic texture coating and DecoColor MP Classic. DecoBase I is supplied as an unpigmented concentrate intended to be tinted with DecoColor MP Classic. Two (2) texture course applications have proven to give excellent performance results. The undiluted coverage rate for the DecoColor texture course is approximately 0.05 gallons per square yard, per application.

### **6.1 Mixing Instructions**

The following mixes have been found to be satisfactory for average surface conditions:

DecoBase I 920-05	55 gallons
DecoColor ® MP Classic 920-27	15 gallons
Clean potable water	23 gallons

Thorough mixing is required. A mechanical mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application. In very warm conditions more water may be added.

### **6.2 Installation**

Using a 50 durometer flexible rubber squeegee apply DecoBase I mix parallel to one of the sides of the area to be coated. Care should be taken not to leave ridges where adjoining applications overlap. Application in hot conditions are improved by keeping surface damp with a fine mist water spray. Additional applications should be installed at 90° to the previous application.

### **6.3 Drying and Cure Time**

The DecoColor Texture Course must be allowed to dry 4 hours before another coating can be applied, assuming 70°F temperatures and 50% relative humidity. Low temperatures and high humidity will increase drying time dramatically.

## **7.0 APPLICATION OF DECOCOLOR FINISH COURSE OR EQUIVALENT**

One (1) finish course of DecoColor MP Classic has proven to give excellent performance results. The undiluted coverage rate for the DecoColor finish course is approximately 0.04 gallons per square yard, per application.

### **7.1 Mixing Instructions**

The following mixes have been found to be satisfactory for average surface conditions:

DecoColor MP Classic 920-27	55 gallons	30 gallons
Clean potable water	38 gallons	20 gallons

Thorough mixing is required. A mechanical mixer is recommended and mixture should be stirred until homogeneous. Periodic mixing should take place as job progresses to ensure consistent application. In very warm conditions more water may be added.

### **7.2 Installation**

Using a 50 durometer flexible rubber squeegee apply DecoColor MP Mix parallel to one of the sides of the area to be coated. Care should be taken not to leave ridges where adjoining applications overlap. Applications in hot conditions are improved by keeping surface damp with a fine mist water spray. No pooling should be allowed. Additional applications should be installed at 90° to the previous application. Follow squeegee application with a broom finish.

### **7.3 Drying and Cure Time**

DecoColor MP must be allowed to dry for 4 hours between coating applications, assuming 70°F temperatures and 50% relative humidity. Low temperatures and high humidity will increase drying time dramatically.

## **8.0 APPLICATION OF WHITE LINE PAINT 920-22 or Equivalent**

One (1) application has proven to give excellent coverage. Approximately 3/4 gallon is needed for a standard tennis court.

### **8.1 Mixing Instructions**

White Line Paint comes ready to apply. Only gentle stirring is necessary. **DO NOT DILUTE.**

### **8.2 Striping Layout**

Consult the American Sports Builders Association specifications for proper striping layouts for the recreational surface.

### **8.3 Application**

Apply White Striping Paint 920-22 to the clean, dry, color coated surface by brush, roller, airless spray or special marking equipment. Apply tape to both sides of the area to be striped. Apply a primer coat of the final acrylic color coating over the inside edges of the tape. This will seal the tape to the acrylic surface and prevent the White Striping Paint from bleeding under the tape. One coat is usually enough.

### **8.4 Drying and Cure Time**

White Striping Paint must be allowed to dry for 4 hours between coating applications. Completed projects should be allowed 24 hours before releasing to play.

## **9.0 Execution by Specialized Agency**

Contractor shall submit names of specialist agencies alongwith information about their technical capabilities for approval of Engineer-in-Charge. This work shall be got executed form the specialized agency so approved by Engineer-in-Charge. However the responsibility of the work shall remain with the contractor.

## Condition for concrete/RCC Work

1. Design mix concrete shall be used for all RCC / CC works wherever specified. RMC as per approved design mix from approved RMC plant shall be used. Wherever letter M has been indicated, the same shall imply for the Design Mix Concrete. The Design Mix Concrete will be designated based on the principles given in IS 456:2000, 10262 & SP 23. The concrete mix shall be designed for the specified target mean compressive strength in order to ensure that work test result do not fall below the acceptance criteria specified for the concrete mix. The Contractor shall provide design mixes for each class of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting requirements specified for approval of Engineer-in-Charge. The mix shall be designed with required quantities of admixture/plasticizer to achieve required workability & strength.
2. Following parameters shall be adopted for mix design for moderate exposure.

1.	Nominal maximum size of aggregate	:	20mm angular as per CPWD specifications.
2.	Degree of quality control	:	Good
3.	Type of Exposure	:	Moderate
4.	Maximum water cement ratio	:	0.50
5.	Minimum cement content	:	330 kg/ cum for M25
6.	Type of cement used	:	OPC 43 grade conforming to IS:8112
7.	Sand	:	Coarse Sand as per CPWD specification
8.	Slump for workability of concrete	:	As per CPWD specifications

3. Approved admixture conforming to IS:9103 shall be permitted to be used for obtaining required workability and for retarding/ accelerating setting time of concrete. The chloride content in the admixture shall satisfy the requirement of BS 5075. The total amount of chloride content in the admixture mixed concrete shall satisfy the requirement of IS : 456-2000. **Fly ash shall not be used in design mix concrete.**
4. The contractor shall engage one of the following approved laboratories/test house for designing the concrete mix in accordance with relevant IS code and to conduct laboratory tests to ensure the target strength & workability criteria for a given grade of concrete.
  - a) IIT, Delhi
  - b) C.R.R.I. Delhi
  - c) National Council for cement & Building Material, Ballabgarh.
  - d) Sri Ram Test Laboratory
 The various ingredients for mix design/laboratory tests shall be sent to the lab/test houses through the Engineer-in-Charge and the samples of such aggregates sent shall be preserved at site by the department

In the event if all the four laboratories are unable to carry out the requisite design/testing, the contractor may get it done from any other laboratory with prior approval of the Engineer-in-Charge.

- a) The contractor shall submit the report on design mix from any of the above approved laboratories for approval of Engineer-in-Charge within 45 days from the date of issue of letter of award of work. No concreting shall be done until the design mix is approved. In case of white Portland cement and the likely use of admixtures in concrete with ordinary Portland/white Portland cement, the contractor shall design and test the concrete mix by using trial mixes with white cement and or admixtures also, for which nothing extra shall be payable.
  - b) In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised laboratory mix design report conducted at laboratory established at site shall be submitted by the contractor as per the direction of the Engineer-in-Charge.
  - c) All cost of mix designing and testing connected therewith including charges payable to the laboratory shall be borne by the University. All material required for concrete mix shall be provided by contractor for which nothing extra shall be paid. In case the test of mix design fails, cost of redesigning and testing including material required for concrete mix shall be borne by contractor.
5. The cost of packaging, sealing, transportation, loading, unloading, cost of samples and the testing charges for mix design in all cases shall be borne by the contractor.
  6. The contractor shall make cubes of trial mixes as per approved mix design at site laboratory for all grades of concrete in presence of the Engineer-in-Charge using same ingredients as adopted for design mix., prior to commencement of concreting and get them tested in presence of Engineer-in-charge for 7 days and 28 days. For each design mix a set of six cubes shall be prepared from each of the three consecutive batches three cubes from each set shall be tested at the age of 7 days and three cubes at the age of 28 days. The cubes shall be made, cured, transported and tested strictly in accordance with CPWD specifications. The average strength of cubes at the age of 28 days shall exceed the specified target strength for which design mix has been approved.
  7. For each change of source of quality/ characteristic properties of the ingredients from that approved & used in the concrete mix during the work, a fresh mix design shall be got done by the contractor. Revised trial mix test shall be conducted at laboratory established at site and shall be submitted by the contractor as per the direction of the Engineer-in-Charge. Cost of designing, testing and material shall be borne by contractor.
  8. However, contractor may be allowed to use the design mix of concrete being used by RMC producing plant duly approved by one of the laboratories as mentioned at 4 above provided that the source of ingredients of concrete remains same as considered in the design mix.
  9. Contractor shall arrange concrete from Ready Mix Concrete (RMC) producing plants (within 50-km distance from the site of work) supplying concrete in Delhi. The RMC plant proposed to be engaged by the contractor shall fulfill the following requirements:
    - i. It shall be fully automatic computerized
    - ii. It should have supplied RMC for Govt. projects of similar magnitude.
    - iii. It should have facility for providing printed advice showing ingredients of concrete carried by each mixer.



10. For procurement of ready mix concrete from ROMS plants, the contractor shall, within a 15 days of award of the work, submit list of at least three RMC plant companies of repute along with details of such plants including details of transit mixer and pumps etc. to be deployed indicating name of owner/company, its location, capacity, technical establishment, past experience and text of MOU proposed to be entered between purchaser (the contractor) and supplier (R M C Plant) to the Engineer-in-Charge. The Engineer-in-Charge shall give approval in writing (subject to drawl of MOU). The contractor shall draw the MOU with approved RMC plant owner/company and submit to Engineer-in-Charge with in a week of such approval. The contractor will not be allowed to purchase ready mixed-concrete without completion of above stated formalities for use in this project.
10. Notwithstanding the approval granted by Engineer-in-Charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.
11. The Engineer-in-Charge will reserve the right to inspect at any such stage and reject the concrete if he is not satisfied about quality of product. The contractor should therefore draw MOU/agreement with RMC owner/ company very carefully keeping all terms and conditions/specifications forming a part of this tender document.
12. It shall be the responsibility of the contractor to ensure that all-necessary equipment manpower & facilities are made available to Engineer-in-Charge and/or his authorized representative at RMC plant.
13. Ingredients, admixtures & water declared unfit for use in production of mix shall not be used. A batch mix found unfit for use shall not be loaded into the transit mixer for transportation.
14. The RMC produced concrete shall be accepted by Engineer-in-Charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.
15. Quality Control of Ready-Mix Concrete

It shall be the responsibility of the contractor to ensure that the RMC producer provides all necessary testing equipments and take all necessary measures to ensure Quality control of ready – mixed concrete. In general the required measures shall be:

i) Control of Purchased Material Quality

RMC producer shall ensure that all the materials purchased and used in the production of concrete conform to the stipulation of the relevant agreed standards with the materials supplier and the requirements of the products mix design and quality control procedures. The materials shall be accomplished by visual checks, sampling and testing, certification and information/ data from material supplier. Necessary equipment for the testing of all material shall be provided and maintained in calibrated condition at the plant by the RMC producer.

ii) Control of Material Storage

Adequate and effective storage arrangement shall be provided by RMC producer at RMC plant for prevention of contamination, reliable transfer and feed systems, drainage of aggregates, prevention of freezing or excessive solar heating of aggregate etc.

- iii) Record of Mix Design and Mix Design Modification Computer Print outs of each Truck Load. Each truckload/ transit mixer dispatched to site shall carry computer printout of the ingredients of the concrete it is carrying. The printout shall be handed over to Engineer-in-Charge or his representative at site before RMC is used in work.

- iv) Transfer and Weighing Equipment

RMC producer shall ensure that a documented calibration is in place. Proper calibration records shall be made available indicating date of next calibration due, corrective action taken etc. RMC producer shall ensure additional calibration checks whenever required by Engineer-in-Charge in writing to contractor. RMC producer shall also maintain a daily production record including details of cubes supplied. Record shall also be maintained of what materials were used for that day's production including water and admixtures.

The accuracy of measuring equipment shall be as per manufacturer's recommendation/ relevant IS specifications.

- v) Production of Concrete

The following precautions shall be taken during the production of RMC at the plant:

- a. Weighing (correct reading of batch data and accurate weighing) - For each load written, printed or graphical records shall be made of the weights of the materials batched, the estimated slump, the total amount of water added to the load, the delivery ticket number for that load and the time of loading the concrete into the truck.
- b. Visual observation of concrete during production and delivery during sampling and testing of fresh concrete assessment of uniformity, cohesion, workability, adjustment to water content: The workability of concrete shall be controlled on a continuous basis during production. The batch mix found unfit shall not be loaded into the truck for transportation. Necessary corrective action shall be taken in the production of mix as required for further batches.
- c. Use of adequate equipment at the plant to measure surface moisture content of aggregates, particularly fine aggregate or the workability of the concrete, cube tests etc. shall also be ensured.
- d. Making corresponding adjustment at the plant automatically or manually to batched quantities to allow for observed, measured or reported changes in materials or concrete qualities.
- e. Sampling of concrete, testing, monitoring of results.
- f. Diagnosis and correction of faults identified from observations complaints. The RMC plant produced concrete shall be accepted by Engineer-in-Charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.

16. Ready mix concrete shall be arranged in quantity as required at site of work. The ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-Charge.
17. If so required by the Engineer-in-Charge, the RMC producer shall provide separate storage space/godown for storage of materials approved by Engineer-in-Charge for the design mix concrete.
18. The use of PPC/Fly ash/mineral based admixtures in RMC shall not be permitted.
19. No addition of water or other ingredients shall be permitted in the RMC at site or during transit.
20. The concrete shall be placed by pump of suitable capacity or tower crane and the contractor shall arrange sufficient length of pipe at site to place the concrete in the minimum required time. Nothing extra shall be paid for placing of concrete through concrete pump/ tower crane.
21. Printed delivery tickets shall be produced with each truck load of RMC.
22. The representative of RMC supplier shall attend the site meeting as and when decided by the Engineer-in-Charge.
23. The contractor shall assess the quantity of RMC requirement at site well in advance and order accordingly to the RMC supplier. In case excess RMC is received at site, the Department shall not be under any obligation to get the extra quantity utilized and no payment for such RMC shall be made.
24. The contractor shall have to employ labour in shifts to ensure continuous casting of raft and other RCC members. No extra payment on this account shall be made.
25. The Engineer-in-charge reserves the right to exercise control over the:
  - i) Ingredients, water and admixtures purchased, stored and to be used in the concrete including conducting of tests for checking quality of materials, recordings of test results and declaring the materials fit or unfit for use in production of mix.
  - ii) Calibration checks of the on site batching plant / RMC plant.
  - iii) Weight and quality check on the ingredients, water and admixtures added for batch mixing.
  - iv) Time of mixing of concrete.
  - v) Testing of fresh concrete, recordings of results and declaring the mix fit or unfit for use. This will include continuous control on the workability during production and taking corrective action.
26. All required relevant records of RMC/batching plant shall be made available to the Engineer-in-Charge or his authorized representative. Engineer-in-Charge shall, as required, specify guidelines & additional procedures for quality control & other parameters in respect of materials and production & transportation of concrete mix, which shall be binding on the contractor & the RMC plant.

27. 43 grade OPC (conforming to IS- 8112) of brand/make/source as approved by Engineer-in-Charge shall only be used for production of concrete. Fly ash is not allowed for production of concrete.
28. The item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery T&P etc. (except shuttering and reinforcement which will be measured & paid for separately) required for design mix concrete of required strength and workability and for transporting, placing, compacting and curing etc. The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design.
29. Ready mix / batching plant concrete shall be arranged in quantity as required at site of work. The ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-Charge.
30. The contractor shall necessarily use the surface vibrator for compaction of concrete in floor slab etc. For placement of concrete at various levels tower crane of appropriate size, capacity and boom length or concrete pump shall necessarily be deployed by the contractor. However, mechanical hoist can be used by the contractor for lifting other construction materials.
31. WORK STRENGTH TEST
- Frequency of sampling and standards of acceptance, acceptance criteria and standard deviations shall be as per CPWD specifications 2009 for design mix concrete.
32. **Vacuum Dewatered Flooring:**
- a) Planning: The work shall be planned dividing the slab on grade area into narrow strips about 4.0 m to 5.0 m wide, with a length of about 20 m. The width shall be dependent on the dimension that can be dealt with in one go by the vacuum dewatering equipment. Each such strip shall be cast in one go. Control joints shall be introduced with each strip dividing it into about four segments of about 5 metres length. Alternate strips shall be cast in one go. The remaining strips shall be cast after a gap of 14 days, allowing most of shrinkage strains to occur. The longitudinal and the transverse joints along the periphery of the strip shall be construction joints.
- b) Expansion/Contraction Joints shall be provided at a spacing of about 30 to 40 m in each direction or as approved by Engineer –in-Charge. Wherever slab on grade is adjoining the main structural members of buildings, isolation joints shall be introduced as per detail. The contractor shall seek approval of such planning from the Engineer-in Charge.
- c) Formwork: The side forms shall be absolutely plane members in MS channel with necessary lateral supports. The forms shall have holes to take through the reinforcing bars where required. The holes shall be suitably plugged just before concreting in order to avoid leakage of mortar/cement slurry. Verticality of forms shall be ensured before commencement of concreting.
- d) Sequence of Construction: Sub-grade shall be prepared by filling, moistening and compacting in layers in accordance with earthwork specifications, of about 200 mm thick or as approved by Engineer-in – Charge. Sub-base shall be cast

in PCC 1:4:8 (1 cement : 4 coarse sand: 8 coarse aggregate, 40 mm nominal size) or as directed by the Engineer-in-Charge.

- e) Place formwork in position for the first set of strips to be cast.
- f) Tie reinforcement in position taking special care of details at various joints. Start pouring of M25 grade concrete from one end of the strip/strips. Try to complete compaction of concrete upto a little beyond the control joint. Place in position the mats of dewatering equipment and begin dewatering process removing the water bled by concrete. Dewatering equipment manufacturer's specifications shall be followed for deciding upon the dewatering time period. Expected time period is 3 to 5 minutes for every 25 mm thickness of slab.
- g) Move the dewatering equipment to the next adjacent segment and proceed with removal of water. Immediately after dewatering, the top of slab shall be finished smooth as per concrete specifications, noting that the slab is not to receive any additional floor finish. Grooves shall be cut all along the specific control joints as per details. Grooves of the required depth and width shall be cut by sawing across the strip, after initial setting when the concrete is hard enough for being cut without getting torn. Grooves shall be true to their size, alignment and have no broken edges. Ravelling of concrete at such joints shall be prevented. The grooves may be filled with mastic sealant as required.
- h) Construction Joints: Concreting shall halt only at planned construction joints. In case concreting has to be stopped elsewhere under unavoidable circumstances, construction joint detail shall be introduced at that point and approval of Engineer-in-Charge shall be sought. Otherwise the entire concreting in the strip shall be discarded, removed immediately by the contractor and shall be begun afresh later.

**LIST OF APPROVED MATERIALS**

1. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies.
2. Wherever applicable, the Engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.

In case on non availability of the brand specified in the contract, the Contractor shall submit the documentary evidence of non availability of approved brand and suggest the alternate brand of equivalent quality for the approval of the competent authority. It will be at the discretion of the Engineer-in-Charge to approve or reject the brand suggested by the contractor and approve the name of any other equivalent brand.

3. Unless otherwise specified, the brand/make of the material as specified in the item nomenclature, in the particular specifications and in the list of approved materials attached in the tender, shall be used in the work.

	<b>Material</b>	<b>Brand / Make</b>
1.	Cement	Ultratech, ACC, Vikram 43 Grade, JP Rewa, JK, Birla, Shree Cement.
2.	White Cement	JK, Birla
3.	Water Proofing Compound (Liquid)	Pidiproof Ltd., Cico, Impermo
4.	Synthetic Enamel Paints	ICI (Dulux),Asian (Apolite),Berger (Luxol),Nerolac (NST)
5.	Primer	Asian, ICI, Berger, Nerolac
6.	Oil Bound Distemper	Asian(Tractor), ICI (Maxilite),Berger(Bison),Nerolac (NAD)
7.	Plastic /Acrylic Emulsion Paint	Asian (Royale), ICI (Velvet), Berger (Luxol Silk), Nerolac (Allscapes)
8.	Premium Acrylic Smooth exterior paint	Out stretch of NITCO, Apex Ultima of Asian, Weather shield max of ICI
9.	Wall putty	Birla, JK, Sakarni
10.	Cement Paint	Snowcem Plus, Berger (Durocem Extra) Nerolac with titanium
11.	Paver Blocks	Terrafirma, Unipaver.
12.	Polymer Modified quick set tile adhesive	Bal Endura, Pidilite
13.	Aluminium Extrusions/ Sections	Hindalco, Indalco, Jindal
14.	Structural steel section	TATA, SAIL, RINL
15.	Tubular Steel work (M. S. Pipes)	TATA, Jindal (Hisar), GSF.
16.	Steel	SAIL, TISCO, RINL, JINDAL
17.	GI Pipe	Tata, Jindal (Hissar)
18.	GI fitting	Unik, R, KS
19.	Centrifugally Cast Iron Pipe & Fittings	Neco, Kapilansh
20.	C.I. Manhole Covers and Frames	SRIF, RIF, Kajeco
21.	PCC/SFRC Manhole covers and frames	KK Manholes and Grating Pvt. Ltd.
22.	Sand cast iron fitting	RIF, NFCO, BC
23.	SW pipes & Gully Taps :	Perfect, Burn, Hind.
24.	Sports Surface:	Deco Turf or equivalent of international standard

# Schedule of Quantities

## Schedule of Quantity

**Name of Work:** A/A GGSIP University, Dwarka Campus, New Delhi

**Sub Head:** Construction of tennis and basketball court.

S No	Description	Unit	Qty	Rate	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.				
	All kinds of soil.	cum	200		
2	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level.				
	1:5:10 ( 1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size )	cum	180		
3	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	8		
4	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	8		
5	Centering and shuttering including strutting, propping etc. and removal of form for :				
	Walls (any thickness) including attached pilasters, plinth and string courses etc. butteresses,	sqm	80		
6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				
	Thermo-Mechanically Treated bars.	kg	2000		
7	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	150		
8	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	kg	11610		
9	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	25 mm thick with 20 mm nominal size stone aggregate	sqm	65		



10	Kota stone slab ( mirror finish) flooring over 20 mm ( average ) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of cement mortar 1:4 ( 1 cement : 4 coarse sand):				
	25 mm thick.	sqm	175		
11	12 mm cement plaster of mix :				
	1:6 ( 1 cement : 6 coarse sand )	sqm	55		
12	12 mm cement plaster finished with a floating coat of neat cement of mix :				
	1:3 (1 cement: 3 fine sand)	sqm	233		
13	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm. depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto 50 metres.	sqm	3810		
14	Supplying and stacking at site.63 mm to 45 mm size stone aggregate.	cum	480		
15	Supplying and stacking at site.53 mm to 22.4 mm size stone aggregate.	cum	360		
16	Supplying and stacking at site .				
	a)Stone screening 13.2 mm nominal size ( Type A ).	cum	30		
	b)Stone screening 11.2 mm nominal size (Type B)	cum	20		
	c)Moorum	cum	100		
17	Laying , spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking , rolling with 3 wheeled road / vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density .	cum	670		
18	Providing and applying tack coat using hot straight run bitumen of grade 80 / 100 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications.				
	On W.B.M. @ 0.75 Kg / sqm.	sqm	1950		
19	Providing and laying bituminous macadam using crushed stone aggregates of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				
	40 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 3.5 % (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	80		
20	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm made of G.I. wire of dia. 3mm including strengthening with 2mm dia. wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	sqm	1130		

21	Providing and laying in position ready mix M25 grade concrete for CC pavement using cement concrete as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade including pumping of RMC from transit mixer to site of laying, excluding cost of centering shuttering but including cost of admixtures in recommended proportions as per IS : 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability as per direction of engineer-in charge. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in- charge. (The panel shuttering work shall be paid for separately).(Note:- Cement content considered in this item is @ 330 kg/cum.Excess/less cement used as per design mix is payable/ recoverable separately).	cum	175		
22	Providing and laying semi- dense Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				
	25 mm compacted thickness with bitumen of grade VG- 30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Sqm	1950		
23	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	each	220		
24	Providing and laying Deco Turf synthetic cushion system of international level with following eight sports master cushioned surfacing material or equivalent including marking of line with sports master white paint and high binding heavy bodied acrvlic lates covered in one application. i) Filler course (Asphalt/acrvlic) 1 ii) Cushioned rubber course (Dense) a) Heavy rubber course- 3 layers b) Fine rubber course- 2 layers iii) Colour texture course 1 iv) Colour finish course 1 8 layers The rates are inclusive of all necessary materials inclusive of imports duty if any and for complete work as per direction of Engineer-in-charge.	sqm	1950		

25	Providing and fixing net post for Lawn Tennis court 80 mm MS square pipe 3mm thick 1.65m length wind system with heavy duty internal winder of winder gear, gun metal bush & brass shaft. The also be of chorme plate mild steel and with power finish of approved shade including demolishing work in excavation and fixing with cement concrete cement: 2 coarse sand : 4 graded stone aggregate size) of size 0.50 x 0.50 x 0.60M (cost of c.c. 1:2:4 included in the item) all complete job as per Engineer-in-charge	pair	3		
<b>Total</b>					

EE/UWD