राष्ट्रीय प्रौद्योगिकी संस्थान,
उत्तराखण्ड


## National Institute of Technology, Uttarakhand

# AGENDA FOR THIRD MEETING OF 

 BUILDING \& WORKS COMMITTEE Date: $1^{\text {st }}$ February, 2014National Institute of Technology,
Uttarakhand

# Minutes of the Second Meeting of Building and Works Committee of National Institute of Technology, Uttarakhand 

The following members were present:

| Prof. H.T. Thorat | - Chairman |
| :--- | :--- |
| Mr. Arun Kumar | - Member |
| Mr. Alex P. Thomas | - Member |
| Prof. M.N. Viladakar | - Member |
| Mr. Salek Chand | - Member |
| Dr. Vinay Pant | - Member |
| Prof. V.K. Sharma | - Member |

At the outset, the Chairman welcomed all the members and thanked IIT Roorkee and Professor M N Viladkar for providing facilities to conduct the meeting.

The Committee discussed the following agenda:
BWC 02.01 Confirmation of minutes of the First meeting of Building and Works Committee
Minutes of the First Meeting of Building and Works Committee are confirmed with addition of comment 'Construction will be taken-up by the agency only after getting the approval of regulatory body if any.', as suggested by Mr. B P Singh.

## BWC 02.02 Action Taken Report

Noted

BWC 02.03 Finalization of Agency for establishing the Permanent Campus for the Institute on 'Concept to Commission Basis'.
The BWC discussed and approved in principle the NBCC Ltd. (as per GFR Amendment to Rule 126(2) as the construction agency for the Phase I. However, individual work shall be assigned with approval of BWC / BoG. Agency charges of NBCC shall be negotiated and shall be approved by BWC / BoG before MOU is signed.

BWC 02.04 Approval to start the work of Master Plan
As the Institute does not have technical staff to handle tendering and other related work, tendering for selection of an Architectural firm for Master Plan shall be done by NBCC. Selection of the architectural firm shall be done with the approval of the board. Tendering documents shall be finalized in consultation with Director and charges to be paid to NBCC shall be approved by the Board.

BWC 02.05 Approval to Constitute the Advisory Committees to discuss designs
submitted by the construction agency
The BWC approved the proposal and authorized the Director, NIT Uttarakhand to take necessary action as per his descretion in this regard.

BWC 02.06 Approval for the additional cost for foundation of the building to be constructed in ITI
BWC approved the revised (due silt deposited in recent devastating floods) estimate of Rs. $6,77,96,000 /$ - for the prefabricated construction on pile foundation and execution of Mechanical and Electrical Engineering blocks.

BWC 02.07 Approval for construction of Pre-fabricated structure for Civil Engineering Department
BWC approved the estimate of Rs. $3,27,65,000 /$ - for the prefabricated construction on pile foundation and execution of Civil Engineering block.

BWC 02.08 Approval for construction of Pre-fabricated Hostel in Polytechnic Campus BWC approved the estimate of Rs. $1,20,50,000 /$ - for the prefabricated construction and execution of Hostel block.

The meeting ended with Vote of thanks to the Chair.


Prof. H.T. Thorat (Chairman)


Mr. Arun Kumar
(Member)


Mr. Alex P. Thomas (Member)



Mr . Sałek Chan (Member)


Dr. Vinay Pant (Member)


Prof. V.K. Sharma
(Member)

## National Institute of Technology, Uttarakhand

Minutes of the Meeting convened on $6^{\text {th }}$ January 2014 at IIT Roorkee to negotiate Service Charges of NBCC

A meeting is convened on $6^{\text {th }}$ January 2014 at IIT Roorkee to negotiate Service Charges of NBCC. NIT Uttarakhand was represented by following officials.

Professor HT Thorat, Director, NITUK
Professor V K Sharma, Dean (P\&D), NITUK
Professor M N Viladkar, Professor of Civil Engineering, IITR
Professor UK Sharma, Professor of Civil Engineering, IITR
Professor R Anbalagan, Professor of Earth Sciences, IITR
NBCC was represented by following Members
Shri.Nilesh Shah, Executive Director, NBCC
Shri. Rajesh Arora, General Manager, NBCC
After deliberating the location of NIT Uttarakhand, Service Charges paid by adjoining Government Institutions and volume of work it was mutually agreed that NIT Uttarakhand shall pay $10 \%$ (including all services like architectural service, structural design, geotechnical investigation, topographical survey, field testing, quality control etc.) as Service Charges to PMC over the cost of execution of the construction work.

(HT Thorat)

(V K Sharma)


(MN Viladkar)
O611114
(UK Sharma)

(Nilesh Shah)

## National Institute of Technology, Uttarakhand

## MINUTES OF THE $4^{\text {th }}$ MEETING OF THE BOARD OF GOVERNORS HELD ON $15^{\text {th }}$ NOVEMBER 2013.

The following members were present:

1. Shri Bhaskar Bhat - Chairman
2. Shri Yogendra Tripathi - Member
3. Prof. S. C. Lakkad - Member
4. Prof. Geetha Nambissan - Member
5. Prof. H. T. Thorat - Member
6. Prof. V. K. Sharma - Member
7. Dr. A. S. Dhundi . - Member

Prof. Pradipta Banerji was out of the country and hence could not attend the meeting.
At the outset, the Chairman welcomed all the members.
The Committee discussed the following agenda:
BoG 04.01: Confirmation of the Minutes of the third meeting of Board of Governors. Minutes of the Third Meeting of Board of Governors are confirmed.

BoG 04.02: Action Taken Report
Action Taken Report isnoted
BoG 04.03: To note the Minutes of Second Meeting of Building and Works Committee Minutes of Second Meeting of Building and Works Committee are noted \& approved.

BoG 04.04: Finalization of Agency for establishing the Permanent Campus for the Institute on Concept to Commission basis
The BOG discussed and approved the NBCC Ltd. (as per GFR Amendment to Rule 126(2) as the construction agency for the Phase I. However, individual work shall be assigned with approval of BoG. Agency charges of NBCC shall be negotiated by Director recommended by BWC and shall be approved by FC / BoG before MOU is signed. The Director shall constitute a committee to negotiate with at least one BWC member as part of the committee.

## BoG 04.05: Approval to start the work of Master Plan

The BOG discussed in detail the need to save the time to select an Architectural Firm, identified by NBCC, and authorised the Director to approve and appoint an Architectural Firm for preparing Master Plan in consultation of BWC. The Director should ensure that NBCC has followed due process of identifying the Architectural firm.


BoG 04.06: Approval for authorized signatories required for New Pension Scheme (NPS) mechanism
The BOG discussed and approved authorized signatories required for New Pension Scheme (NPS) mechanism

BoG 04.07 (A): Ratification of expenses approved by Chairman, Board of Governors. The BOG ratified the expenses approved by Chairman, Board of Governors.

The meeting ended with Vote of thanks to the chair.


H T Thorat
Director

## Submitted for Approval

Approved / Not Approved


The Chairman
Board of Governors
NIT, Uttarakhand

# NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED 

Zonal Office: NBCC Ltd.<br>House No.1, Nit Nagar,<br>Opp. Main Gate, IIT Campus

Roorkee-247667
No. NBCC/ UK/Roorkee/ CONS/2014/09
Dated: 06.01.2014

## NOTE

$\begin{aligned} \text { Sub : } & \text { Brief in respect of appointment of agency for rendering consultancy } \\ & \text { services for execution of new NIT-Uttrakhand at village Sumari, } \\ & \text { Srinagar (Uttrakhand). }\end{aligned}$
NBCC has appointed M/s. DDF Consultant as an Associate Consultant for rendering Consultancy services for the proposed Construction of the Permanent Campus for the NIT - Uttarakhand at village Sumari, Srinagar Uttarakhand). The appointment of the consultant has been done by following the NBCC procedures which basically involves following steps:
i. Inviting e-tenders through e-portal and tender wizard from the agencies prequalified by NBCC under the appropriate categories.
ii. The said empanelment of the consultants is done by calling applications from the Architect/consultancy firms. The applications are invited through the etendering process. The qualifying criterion is laid down as per the CVC norms.
iii. The tenders from the empanelled Consultant are invited in two bid system. The first bid comprise the Technical bid, EMD and Tender fee etc. The second Bid comprise the Price Bid. Both the Bids i.e. the Technical Bid and the Price Bid are submitted simultaneously on the Tender Portal in soft copies and also in Hard Copy in the NBCC office by all the Bidders.
iv. The bidders who fulfill the qualifying criteria are advised to submit the Concept Design Presentation of the proposed work. The Price Bid of only those bidders are opened who pass the Design Concept Presentation.
v. The Presentation of the Concept Design is made by the bidders who qualify the Technical evaluation stage - I i.e. who have submitted the requisite fee and have qualifying experience as prescribed in the Tender. The Concept Design Presentation of the bidders who have qualified stage - I technical evaluation, is evaluated by a committee. Marking is done by the members based on various components of the Design and the bidders who score at least 75 average marks are intimated a date for opening of their online Price Bid.
vi. On the Scheduled date, the online Price Bids are opened by the Tender Scrutiny Committee in presence of the representatives of the intending bidders.
vii. The work is awarded to the lowest bidder.


Accordingly NBCC invited tenders for appointment of Associate Consultants for the Construction of new campus for NIT-Uttrakhand for rendering services of drawings \& design of Architecture, structure and services for the subject project through etender process from the consultants empanelled with NBCC in the categories of SP1 (Group-IV and above) and SP-2 (Group-IV and above) as below:

| S. No . | Applicable category | Available empanelled agencies |
| :---: | :---: | :---: |
| 1. | Category C-1 Group V \& VI <br> Non specialized projects, Residential Building works (Rs. 100.00 Cr . to Rs. 300.00 Cr .) | i. M/s Arch-En-Design, New Delhi. <br> ii. M/s DDF Consultants, New Delhi. <br> iii. M/s Pentacle Consultant (I) Pvt. Ltd., Mumbai |
| 2. | Category C-2 Group V \& VI <br> Non specialized projects, Non Residential Building works (Rs. 100.00 Cr . to Rs. 300.00 Cr .) | i. M/s Rajiva Kumar \& Associates, Lucknow |
| 3. | Category SP-1 Group IV \& V Specialized $\quad$ projects, Residential Building works. (Rs. $100.00 \quad \mathrm{Cr}$. to Rs. 300.00 Cr .) | i. M/s. Behal Joshi \& Associates, New Delhi. <br> ii. M/s SGAG Consultants Pvt. Ltd. Noida. <br> iii. M/s Enarch Consultants Pvt. Ltd. Noida. <br> iv. M/s Rajinder Kumar Associates, New Delhi. <br> v. M/s Khan Global Engg. Consultants, Banglore. |
| 4 | Category SP-2 Group IV \& V <br> Specialized projects, Non Residential Building works. (Rs. 100.00 Cr . to Rs. 300.00 Cr .) | i. M/s Behal Joshi \& Associates, New Delhi. <br> ii. M/s Ghosh, Bose \& Associates, Kolkalta. <br> iii. M/s SGAG Consultants Pvt. Ltd. Noida. <br> iv. M/s Achal Kataria Architects, New Delhi. <br> v. M/s Arch-En-Design, New Delhi. <br> vi. M/s Archivista Engg. Projects (P) Ltd., Chennai. <br> vii. M/s C.P. Kukreja Associates, New Delhi. <br> viii. M/s Design Associates Inc. Noida. <br> ix. M/s En-Arch Consultants Pvt. Ltd. Noida <br> x. M/s Gherzi Eastern Ltd. Pune. <br> xi. M/s Gian P. Mathur \& Associates (P) Ltd., New Delhi. <br> xii. M/s Khan Global Engg. Consultants Benglore. <br> xiii. M/s Mukesh \& Assocites, Salem (TN) <br> xiv. M/s Pentacle Consultants (I) Pvt. Ltd., Mumbai. <br> xv. M/s Raja Aederi Consultants Pvt. Ltd., New Delhi. <br> xvi. M/s Rajinder Kumar Associates, New Delhi. |

The notice inviting tenders for appointment of Associate Consultant for rendering consultancy services of proposed work of construction of new campus for NIT Uttarakhand was uploaded on the e-tender portal and NBCC website. Copies of the NIT were sent by post as well to the eligible empanelled consultants as listed here in above.

In response to the above NIT, following five agencies submitted their tenders (online and hard copies) till the scheduled last date and submission:

1. M/s DDF Consultants, New Delhi.
2. M/s Design Associates Inc., New Delhi.
3. M/s Enarch Consultants (P) Ltd., Noida.
4. M/s Raja Aederi Consultants Pvt. Ltd., New Delhi.
5. M/s Rajinder Kumar \& Associates, New Delhi.

All the five participating agencies have submitted the required documents and EMD etc. and hence were qualified for Design Concept Presentation. All the four agencies were asked to submit the hard \& soft copies of their Design Concept Presentation. Out of the five qualified participating agencies M/s Raja Aederi Consultants Pvt. Ltd., New Delhi did not submit the Design Concept Presentation and hence the Design Concept Presentation of following agencies was evaluated by the committee:

1. M/s DDF Consultants, New Delhi.
2. M/s Design Associates Inc., New Delhi.
3. M/s Enarch Consultants (P) Ltd., Noida.
4. M/s Rajinder Kumar \& Associates, New Delhi.

The evaluation of the Design concept presentation of all the four eligible agencies was done by the committee as per the standard procedure. The agencies who scored at least 70 marks out of 100 marks only were to be considered to qualify for the evaluation of their financial bids. The criteria of marking of Design concept presentation has been as follow:

## Master Planning <br> Total 30

## 1 Cost effective functions

2 Site orientation
a. Massing $\quad 10$
b. Circulation 5
c. Landscape blending with explain profile
Design concept planning
Total 40

1. Accessible and Environmental 10
friendly considerations
15
2. Energy efficient planning

5
3. Disaster resistant methods
4. Economical design

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8-10--
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## Presentation

1. Overall presentation
2. Overall understanding of planning
3. Presentation of Design concept and response to queries of committee member.

15
Total 30
5

10

The financial bids are uploaded on e-portal and hard copies of financial bids are submitted by the participating agencies along with their technical bids itself both these bids together form a complete tender and hence the evaluation process of the Design concepts presentation has no effect on their financial bids.

On evaluation of the Design concept presentation three agencies, out of four agencies, could pass the Design concept presentation by scoring more than 70 marks out of Total 100 marks and then qualified for the financial bids evaluation.

1. M/S DDF Consultants' Pvt. Ltd. New Delhi.
2. M/S Design Associates Inc. New Delhi.
3. M/S Enarch Consultants' Pvt. Ltd. Noida.

All the qualifying agencies were intimated for opening of their online financials bids by the committee. The consultancy fee quoted by the qualifying agencies has been as below:

1. M/S DDF Consultants' Pvt. Ltd. New Delhi.
0.65\%
2. M/S Design Associates Inc. New Delhi.
0.95\%
3. M/S Enarch Consultants' Pvt. Ltd. Noida.
0.87\%
(L3) $L-2$
Thus M/S DDF Consultants has quoted the least consultancy fee @ $0.65 \%$ and had already been qualified the M/S Design Concept presentation and accordingly M/S DDF Consultants has been appointed as the Associate consultant by NBCC for rendering consultancy services for the construction of new campus for NITUttrakhand at village Sumari ,Srinagar (Uttrakhand ).

The scope of work assigned by NBCC to the Associate consultants, M/S DDF consultants, includes among others, the master planning of the project as well. Thus the fee payable by NBCC to the Associate Consultants is for Master planning also. Since there has been no separate quote by the participating agencies towards Master planning since the financial bids have been invited a single quote basis.

M/S DDF consultant is a competent agency having adequate experience, expertise and resources to execute the consultancy services of the project under consideration.


It is therefore recommended that the NIT - Uttarakhand may get the Master Planning of the project through $\mathrm{M} / \mathrm{s}$. DDF Consultant in view that:

- The agency appointed by NBCC for the consultancy services of the project has adequate experience, expertise and resources to fulfill its obligations.
- The agency has been appointed by NBCC through e-tendering observing the due procedures of the corporation.
- The fee quoted by the agency is quite reasonable and the Scope of the work includes the Master Planning of the Project as well thus the consultancy fee payable to the agency is inclusive of the fee towards Master planning also.
- The quote of consultancy fee is a single quote and fee payable exclusively for the Master Planning alone can't be decided.
- The NIT-Uttrakhand will be required to make no payment separately to the Associate consultant for the Master Planning of the project as the fee payable to the Consultant is inclusive of Master Planning of the Project.

It is therefore proposed that NIT-Uttrakhand may avail the services of M/S DDF consultants for the Master planning of the project for which NIT Uttrakhand will have to make no separate payments to the proposed consultant and the consultancy fee payable by NBCC to the proposed consultant will be inclusive of the Master planning services to be rendered by the proposed consultant to the NITUttrakhand directly.

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& \text { NIT-UItanakhand }
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(Rajesh-Arora)
GM (UK), Rơorkè )

The Director,
NIT Uttarakhand, ITI Campus,


Srinagar (UK)
SUB: Construction of Compound Wall for Permanent Campus of NIT Uttarakhand at Sumari, Srinagar - Cost Estimate

REF: 1. Your Letter No. NITUK/Estate/2013/1983 dated 20.11.2013
2. This office Letter No. NBCC/Roorkee/IIT/NIT (UK)/2014/613 dated 03.01.2014

Dear Sir,
The estimate and design of the proposed Boundary Wall submitted by this office vide Letter No. NBCC/Roorkee/IIT/NIT (UK)/2014/613 dated 03.01.2014 was discussed during the meeting held at IIT - Roorkee dated 06.01.2014 and it was desired that following three types of arrangements shall be incorporated for the Campus Boundary Wall:

1. Compound Wall in stone masonry with plinth beam \& coping, RCC intermediate columns with concertina coil.
2. Chain link fencing in steel frame work
3. M.S. grill compound wall with 10 mm sq. bars at steep slopes to allow flow of water.

We are accordingly submitting the revised estimate and the revised design for the said work at a total cost of Rs. 1327.48 Lass, including contingencies and NBCC agency charges, for needful approval please.

It is requested that approval for call of tenders for the subject work may please be accorded pending the financial sanction of the work so as to save on time. The work to the contractor will be awarded by NBCC only after receiving financial sanction from your end. This arrangement is proposed with a view to generate some turnover within the current financial year.


Encl.: As above

## Copy for information to:

1. The ED, RBG - North, NBCC Ltd., Near Ramp No. 14, Jawahar La Nehru Stadium Complex, Lodi Road, New Delhi

Thanking you
hours Faithfully,

(Rajesh Aroma)
GM (Uttas.kpprod) Y
NATIONAL BUILDINGS CONSTRUCTION CORPORATION LTD．
$\begin{array}{r}\text { ZONAL OFFICE：GM（UK）} \\ \text { H．No．1，NITI NAGAR，NH }-58 \\ \hline\end{array}$ H．No．1，NITI NAGAR，NH－ 58
ROORKEE－ 247667 UTT－UTARAKHAND AT VILL．SUMARI，SRINAGAR（UTTARAKHAND） 40，19，585．05 40，93，510．25 $6,98,71,775.50$ 14，91，028．00 1，31，31，075．15

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| COST ESTIMATE FOR CONSTRUCTION OF BOUNDARY WALL FOR NEW PERMANENT CAMPUS OF NIT UTTARAKHAND |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BOUNDARY WALL |  |  |  |  |  |  |
| S. No. | Ref. DSR - <br> 2013 Item No. | Item of Work | Unit | Qty | Scheduled Items (DSR Items) |  |
|  |  |  |  |  | $\begin{gathered} \text { Rate } \\ \text { (DSR 2013) } \\ \hline \end{gathered}$ | Amount |
|  |  | EARTHWORK |  |  |  |  |
| 1 | 2.8 | Earth work in excavation by mechanical means (Hydraulic excavator) manual means in foundation trenches or drains (not exceeding 1.5 m in 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 50 m . |  |  |  |  |
| 1.1 | 2.8.1 | All kinds of soil. | cum | 11,102.00 | 148.25 | 16,45,871.50 |
| 2.0 | 2.9 | Excavation work by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5 m in 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 soils as directed, within a lead of 50 m . |  |  |  |  |
| 2.1 | 2.9.1 | Ordinary rock | Cum | 2,960.00 | 244.90 | $7,24,904.00$ |
| 2.2 | 2.9.2 | Hard rock (requiring blasting) | cum | 740.00 | 427.75 | 3,16,535.00 |
| 3.0 | 2.25 | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m . | Cum | 10,822.00 | 101.50 | 10,98,433.00 |
| 4.0 | 2.26 | Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials. |  |  |  |  |
| 4.1 | 2.26 .1 | All kinds of soil. | Cum | 3,148.00 | 41.75 | 1,31,429.00 |
| 4.2 | 2.26 .2 | Ordinary or hard rock | cum | 787.00 | 74.90 | 58,946.30 |
| 5.0 | 2.31 | Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared. | 100 Sqm | 75.00 | 579.55 | 43,466.25 |
|  |  | TOTAL OF EARTH WORK |  |  |  | 40,19,585.05 |
|  |  | CONCRETE WORK |  |  |  |  |
| 6.0 | 4.1 | Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level : |  |  |  |  |
| 6.1 | 4.1.8 | 1:4:8 ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) | cum | 761.00 | 3,920.65 | 29,83,614.65 |
| 6.2 | 4.1.10 | 1:5:10 ( 1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) |  | 235.00 |  | $8,63,108.00$ |



BOQ Boundary Wall Permanent Campus, NIT- UK

| S. No. | $\begin{array}{\|l} \text { Ref. DSR - } \\ 2013 \text { Item } \\ \text { No. } \end{array}$ | Item of Work | Unit | Qty | Scheduled Items (DSR Items) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Rate (DSR 2013) | Amount |
|  |  | FENCING WORK |  |  |  |  |
| 24 | 16.19 | Supplying at site Angle iron post \& strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete. | Kg . | 53,032.42 | 69.75 | 36,99,011.30 |
| 25 | 16.20 | Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks $45 \times 45 \times 60 \mathrm{~cm}$ of mix 1:5:10 ( 1 cement:5 fine sand: 10 graded stone aggregate 40 mm nominal size), every 15 th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks $70 \times 45 \times 50 \mathrm{~cm}$ of the same mix, provided with welded steel wire fabric fixed between the posts fitted and fixed with G.I. staples on wooden plugs or tied to 6 mm bar nibs with G.I. binding wire (cost of posts, welded steel wire fabric, painting, earth work in excavation and concrete to be paid for separately) : | sqm | 5,040.00 | 25.80 | 1,30,032.00 |
| 26 | 16.53 | Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m ) having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron ' Y ' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain forizontal including necessary bolts or G.I. barbed wire tied to angle iron all complete as per direction of Engineer-in-charge with reinforced barbed tape(R.B.T.) Spring core ( 2.5 mm thick) wire of high tensile strength of $165 \mathrm{~kg} / \mathrm{sq} . \mathrm{mm}$ with tape ( 0.52 mm thick) and weight $43.478 \mathrm{gm} /$ metre (cost of M.S. angle, C.C. blocks shall be paid separately) | metre | 4,835.00 | 284.10 | 13,73,623.50 |
|  |  | TOTAL OF FENCING WORK |  |  |  | 52,02,666.80 |
|  |  | GRAND TOTAL |  |  | 0 | 10,95,00,047.15 |





Utarakhand Works?


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