

### Er. H.P. Singh

Executive Engineer

## ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੰਧਰ

# UNIVERSITY

Estd. Under Punjab Technical University Act, 1996 (Punjab Act No. 1 of 1997)

Daled 17.61.2013

Prulce 1046

Department of Technical Education and Industrial Training, Punjab,

Plot No. 1, Sector-36A, Chandigarh.

Sh. Amrit Sagar Mittal CMD, Sonalika Tractors Ltd, Hoshiarpur.

Dr. Nachhattar Singh,

Director, PITTTR, Punjab Technical University, Jalandhar.

Dr. J. S. Hundal, Campus Director, PTU GZSCET,

Bathinda.

Sh. S. K. Mishra, Director/Finance,

Punjab Technical University, Jalandhar.

Dr. D. S. Sidhu, Registrar, PIT Nandgarh, PTU GZSCET, Bathinda.

Sh. Rajiv Aggarwal, M/s Archigroup Architects, A-14, Sector-15, Noida -201301. Sh. S.L. Kaushal, Chief Architect, Punjab (Retd), 2865, Sector 42-C, Chandigath.

Sh. Deepak Mittal, Chairman, CIl, Managing Director, Sonalika Tractors Ltd, Hoshiarpur.

Dr. H. S. Bains, Registrar,

Punjab Technical University, Jalandhar. Sh. A. N. Chowdhry,

3-B, Jyoti Nagar, Jalandhar.

Dr. G. S. Bath, Registrar, PTU GZSCET, Bathinda.

Dr. Prabhjot Kaur (Special Invitee), In-charge PTU's Mohali Campus, C102B, Phase VII Industrial Area, Mohali.

Sub : Construction of new campuses of Punjab Technical University  $-37^{th}$  meeting of the Standing Building Construction Committee.

Dear Sir/Madam,

37th meeting of the Standing Building Construction Committee shall be held under the Chairmanship of Dr. R. S. Khandpur, Director General, PGSC at 1430 hours on 30.01.2013 at PTU's Mohali Campus, C102B, Phase VII Industrial Area, Mohali. Agenda and Agenda note for the meeting are enclosed.

You are requested to make it convenient to attend the meeting.

Thanking you

Yours Sincerely, 2011 (H. P. Singh)

Executive Engineer

Dr. R. S. Khandpur, DG, PGSC, SCO 60-61, Sector 34-A, Chandigarh.

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Punjab Technical University Jalandhar

Kapurthala Campus : Jalandhar-Kapurthala Highway, Kapurthala-14460 ( Mobile: 9478098017 www.ptu.ac.in E-Mail: exeptu@gmail.com

#### PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Sub: Agenda for the 37th meeting of the Standing Building Construction Committee.

Item No. 37.1: To confirm the Minutes of 36th meeting of Standing Building

Construction Committee held on 23.10.2012.

Item No. 37.2: Action taken on various items discussed during previous meetings of

Standing Building Construction Committee.

Item No. 37.3: To discuss and finalize the plans of Punjab Institute of Technical

Teachers Training and Research (PITTTR) proposed to be established

at Ladowali Road, Jalandhar.

Item No. 37.4: To discuss and approve the rough cost estimate of proposed buildings

for Punjab Institute of Technology at Nandgarh, Bathinda

Item No. 37.5: To discuss and finalize the plans of proposed Administrative Block,

Student Centre, Auditorium and Hostel buildings at GZS PTU CET,

Bathinda Campus

Item No. 37.6: Any other point with the permission of the Chair.

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## PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Agenda Note for the 37th meeting of the Standing Building Construction Committee.

Item No. 37.1: To confirm the Minutes of 36th meeting of Standing Building Construction Committee held on 23.10.2012.

The minutes of 36<sup>th</sup> meeting of Standing Building Construction Committee held on 23.10.2012 were circulated on 30.10.2012. The minutes circulated are to be confirmed.

Item No. 37.2: Action taken on various items discussed during previous meetings of Standing Building Construction Committee.

Action taken on various items discussed during previous meeting of Standing Building Construction Committee is as under:

- Based upon the discussions held in 36<sup>th</sup> meeting of Standing Building Construction Committee, the Architect has revised the plans for Punjab Institute of Technical Teachers Training and Research (PITTTR) proposed to be established at Ladowali Road, Jalandhar and the same are being presented in this meeting.
- Based upon the discussions held in previous meeting of Standing Building Construction Committee, the Architect has prepared estimate based upon plinth area rates of CPWD for proposed buildings for Punjab Institute of Technology at Nandgarh, Bathinda and the same is to be discussed in the present meeting.
- The conceptual plans for proposed Administrative Block, Student Centre, Auditorium and Hostel buildings at GZS PTU CET, Bathinda Campus have been prepared by the faculty of this campus and the same are being presented as an agenda item.

Item No. 37.3: To discuss and finalize the plans of Punjab Institute of Technical Teachers Training and Research (PITTTR) proposed to be established at Ladowali Road, Jalandhar.

In 36<sup>th</sup> meeting of Standing Building Construction Committee under agenda item no. 36.3, the plans prepared by the Architect for Punjab Institute of Technical Teachers Training and Research (PITTTR) proposed to be established at Ladowali Road, Jalandhar were discussed and following amendments were suggested by the committee:

- The entrance of seminar hall to be provided from outside also.
- ii. The facia of the building will be plastered and painted only i.e. no stone cladding is to be provided.

- iii. In open areas, paved area should be reduced and green area to be increased.
- iv. In hostels, rooms should have attached toilets.
- v. Provision for split ACs may be kept for all the rooms of the hostel.

The Architect has revised the plans after incorporating the above amendments and the same are being presented in the meeting.

The matter is placed before the Standing Building Construction Committee for discussions and approval of the plans.

Item No. 37.4: To discuss and approve the rough cost estimate of proposed buildings for Punjab Institute of Technology at Nandgarh, Bathinda

The building plans and finishing schedule for the proposed buildings for Punjab Institute of Technology at Nandgarh, Bathinda were approved in the previous meeting under agenda item No. 36.4. The Architect has prepared estimate based upon plinth area rates of CPWD for these proposed buildings for an amount of Rs. 3043.14 lacs. The same has been got vetted from Thapar University, Patiala as an independent agency. The estimate prepared by the Architect and report of Thapar University are enclosed.

The matter is placed before the Committee for discussions and approval of the above estimate.

Item No. 37.5: To discuss and finalize the plans of proposed Administrative Block, Student Centre, Auditorium and Hostel buildings at GZS PTU CET, Bathinda Campus.

In previous meeting of Standing Building Construction Committee under agenda item No. 36.5, it was decided that Architectural works, design and drawings of all the future works proposed to be taken up GZS PTU CET, Bathinda shall be done in-house by the faculty of GZS PTU CET, Bathinda Campus. Accordingly, plans have been prepared for the proposed Administrative Block, Student Centre, Auditorium and Hostel buildings and are being presented in the meeting.

The matter is placed before the Standing Building Construction Committee for discussions and approval of plans for the proposed buildings.

Item No. 37.6: Any other point with the permission of the Chair.

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#### Estimation Vetting Report

tanuj chopra <tanuj33@gmail.com> To: Harvinder Pal Singh <exeptu@gmail.com> Co: nkwatra@thapar.edu, tchopra@thapar.edu Tue, Dec 11, 2012 at 11:14 PM

Er. H.P. Singh Executive Engineer Punjab Technical University

Dear SIr

As per your reply to our initial vetting report of the estimation for the construction of college building and administration block at PTU's Punjab Institute of Technology campus at Nandgarh (Bathinda), following is brought to your notice:-

- 1. As per the latest circular copy of CPWD Dated 09/08/2012 attached, with your email as reply, mentioning that the cost index of Delhi is approved as 161 over plinth area rates 1/10/2007 as base 100. So, as per this circular, the initial amount estimated by the architect is correct.
- 2. The second observation reply holds correct and the rate for the Item is as per CPWD DSR 2012.

The Plinth area of the buildings/components are in order hance, the preliminary cost estimate submitted for the vetting is correct and is as per the CPWD Plinth Area Rates of 1.10.2007 enhanced by prevailing cost index @ 61%.

With kind regards

Tanuj Chopra [Quoted text hidden]



#### Er. H.P. Singh Executive Engineer

### ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੰਧਰ

PUNJAB TECHNICAL UNIVERSITY

Esid. Under Punjab Technicai University Act. 1996 (Punjab Act No. 1 of 1997)

Rel No PTULCO 1267.

Dated 67-12-12

Head of the Civil Engineering Department, Thapar University,

Patiala.

Subject:

Checking of estimate for construction of college building and

administration block at PTU's Punjab Institute of Technology campus

at Nandgarh (Bathinda).

Ref. :-

Your letter CED/524/4 dated 05-12-2012.

In reference to your above cited letter, following is brought to your notice:-

- The present building cost index as per CPWD with reference to plinth area rate is 1.61 against taken by you as 1.49 (49% above) while vetting the estimate (copy enclosed).
- The rate of Rs 13200/- per Sqm is as published by CPWD in DSR 2012 and has not been derived by the architect.

In view of the above, you are requested to revise your recommendations on the subject estimate.

Thanking you,

(H. P. Singh)

Executive Engineer

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niversity of the Yes

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# Govt. of India Central Public Works Department (Technology Application and Standards Unit) Nirman Bhawan, New Delhi

No: 68/SE/TAS/Building Cost Index/ April/ 2012/256-E

Date: 09/08/2012

Sub: Building Coat Index at Delhi with reference to Plinth area rates 1/10/2007 (as base 100)

The Director General of Works is pleased to approve the Cost Index of Delhi as 161 on 1/4/2042 over plinth area rates 1/10/2007 as base 100.

(Kamta Prasad)
Executive Engineer (TAS)

#### Capp lavended as per making his to:

L. PPS to DG, CPWD, New Delhi

All ADG in CPWD and PWD COVI. OCN.C.T.D

1 CPWD website http://cpwd.gov.in

Executive Engineer (TAS)

#### Dr. Naveen Kwatra

B.E. Civil, M. E. Str., Ph. D

Associate Professor and Head Department of Civil Engineering

Tel: 0175-2393028, Fax: 0175-2393361

E-mail: nkwatra@thapar.edu, hced@thapar.edu

tany 33@ gmil. Con



(Declared as Deemed-to-be-University of£ 3 of the UGC Act, 1956)

Thapar Technology Campus, Post Box No. 32 Patiala 147 004 Punjab India

Fax : +91-175-2364498, 2393005

URL: www.thapar.edu

Ref: CED/524/4/ Dated: 05-12-2012

Mr. H.P Singh **Executive Engineer** Punjab Technical University

Sub: - Checking of estimate for construction of college building and administration block at PTU's Punjab Institute of Technology campus at Nandgarb (Bathinda)

This has reference to you letter no. PTU/CC/1211/5335 Dated 21.11.2012 on the above subject:

It has been checked as per the CPWD Plinth area rates and the total estimated cost along with some observations for different buildings / components are as follows:-

The Plinth areas of the buildings/components are in order.

2. The cost index taken is 61% against 49% mentioned in DSR 2012. This leads to reduction in cost by INR 2, 21, 11,158 (Indian Rs. Two Crore, Twenty One Lakhs, Eleven Thousand, One hundred and Fifty Eight).

3. The rate of flooring is taken as INR 13,200 per sqm appears to be on a higher side as per DSR 2012.

Assuring you our best attention at all times.

With kind regards



Er. H.P. Singh Executive Engineer

# ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ ਜਲੋਪਟ

Esta Under Purpal: Technical University Act. 1996 (Punjab Act No. 1 of 1997)

Ret No Paracolli78

Dated 31. | b - | 2 -

The Director, Thapar University, Patiala.

Subject: Checking of estimate for construction of College Building and Administrative Block at PTU's Punjab Institute of Technology, Nandgarh (Bathinda).

Dear Sir.

This is to inform that Punjab Technical University is to take up the construction of college building and administrative block for Punjab Institute of Technology, Nandgarh (Bathinda). The architect appointed by the University has submitted estimate for these works based upon plinth area rates published by CPWD for an amount of Rs. 30.43 crores. During the previous meeting of BOG of Punjab Technical University, it was decided that the estimates should be got checked through an independent agency. PTU proposes that this estimate

Consultancy charges payable for the above may kindly be advised.

Thanking you,

Yours Sincerely,

Executive Engineer

Punjab Technical University Jalandhar

Kapurthala Campus : Jalandhar-Kapurthala Highway, Kapurthala. Mobile: 9501109042 www.ptu.ac.in E-Mail: exeptu@gmail.com

# PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE- I

# **Preliminary Estimate**

October 27, 2012

Client:
PUNJAB TECHNICAL UNIVERSITY
JALANDHAR

Architect:
ARCHIGROUP ARCHITECTS (REGD.)

A-14, First Floor, Sector 15, Nolda Tel: 0120-4312431

[This preliminary estimate covers the probable cost of construction of Academic block, excluding contingencies and departmental charges. This scope of work was finalized in the 36<sup>th</sup> meeting of the Building Construction Committee held on October 23, 2012. ]

#### PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 <u>PRELIMINARY COST ESTIMATE</u>

#### LIST OF CONTENTS

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Academic Block	

#### PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 PRELIMINARY COST ESTIMATE

#### PREAMBLE TO PRELIMINARY ESTIMATE

- 1. State: PUNJAB
- 2. Name of Work
- 2.1. Construction of Punjab Institute of Technology, Nandgarh.
- 2.2. This preliminary estimate of probable cost of Rs. 304,313,804.93/- (Rs. Thirty crore, forty three lakhs, thirteen thousand, eight hundred and four ) excluding contingencies, cost of external development and departmental charges has been framed by Archigroup Architects (Regd.)
- 3. History
- 3.1. This preliminary estimate covers the probable cost of construction of Academic Block. This scope of work was finalized in the 36<sup>th</sup> meeting of the Building Construction Committee held on October 23, 2012. This estimate is submitted for accord of Administrative approval and expenditure sanction by the competent authority.
- 4. Design & Scope:
- 4.1. The proposed buildings shall be constructed as RCC structure. The present estimate and campus consists of the following building:
  - 4.1.1. Academic Block: The block is G+2 buildings consisting of Tiered Lecture Halls, Tutorials, Laboratories, Seminar Hall for 150 students with tiered seating, Library, Computer centre, Canteen, Administration, Faculty rooms, Common rooms for boys and girls etc.
- Civil works: Most of the items to be executed in these buildings are already included in the provisions in the PAR – CPWD for year 2007.
- 6. The salient features of various provisions are as under:
  - 6.1.Main Building: The building shall be of R.C.C. fremed structure with raft and combined footing.
  - 6.2. Foundation: As per structural design based on soil investigation.

#### 6.3. Flooring :-

All areas except toilets	Kota stone with marble pattern
Staircase	Kota stone
Toilets	Vitrified tiles

#### 6.4. Doors and windows: -

- 6.4.1.Door frames shall be with MS sections and shutters flush doors. Windows shall be of Aluminium sections & shutter as per architectural drawings, Structural glazing has been provided at places in the elevation. Fitting shall be steel or aluminum as per architect's requirements.
- 6.5. Statrcase Railing: Mild steel railing with multi surface paint/ synthetic enamel in other buildings

#### PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 PRELIMINARY COST ESTIMATE

- 6.6. Toilets: Floor vitrified tiles and dado up to door level height with glazed ceramic tiles, vitreous china WC, washbasin and urinals.
- 6.7. Roofing: Terrace shall have coba treatment and false ceiling shall be provided in some areas as per architectural drawing
- 6.8. Internal Finishing: cement plaster, dry distempers, oil bound distemper and acrylic emulsion paint and plastic emulsion with putty, doors shall be enamel/ spirit polish finish. Corridor for colleges shall have permanent tile finish.
- 6.9.External Finishing: Weather proof paint, structural glazing, dry stone cladding as per architectural drawings.

#### Electrical services:

- 7.1. Following provisions have been made in this preliminary estimate.
  - 7.1.1. Fire Extinguisher & hose reel.
  - 7.1.2.Down Comer.
  - 7.1.3. Internal Electrical Installation, telephone data, networking, power plugs etc.
- 7.2. All works shall be carried as per CPWD specification with up to date correction slips.

#### 8. Exclusions:

8.1. No provisions have been made in the preliminary estimate for interior decorations, furniture façade lighting, for external development works like roads, rain water harvesting bulk services such as tube wells, pumps, extension of lines, HT- substation equipments, LT distribution system. DG sets, external lighting, IBMS and CCTV access control system etc.

#### 9. Rates

- 9.1. Rates are based on CPWD PAR of 1.10.2007 and enhanced by prevailing cost index Cost Index @ 61%. For the items not covered under PAR 2007, rates have been derived from market-rates or DSR with appropriate cost index.
- 10. T & P : No special T&P is required all other shall be arranged by the contractor.
- Land : Available.
- Method : By contract after call of tenders.
- 13. Time Allowed : 24 Months from the award of work.

# PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 , PRELIMINARY COST ESTIMATE

						Doforono
				Al- conditioning	Total Cost of	Kelelelle
	Builing / Component	Plinth Area* (Sqm)	COR IN 18	Cost Cost (Refer Annexure 2)	building (4+5)	
					u	7
	2	6	4	n	,	
					20 4 04 0 40 0 03	Ref. Annexure 1
ademii	Academic block	10,367.39	299,556,030.82	4,757,774.11		

# PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 <u>PRELIMINARY COST ESTIMATE</u>

#### Academic Block

Annexure 1

Type of Building -

College

Refer Drg No.

PIT- I/PRE/AC/01,01 TO 01,09

Total Plinth Area -Plinth Area On G. Floor -Total covered area-Double height area

10,367.39 sq.m sq.m 3,706.71 9,855.00 sq.m sq.m

248.85 G + 2 3.65

	Description 3.	Unit	Qty	Nos	Rete	Amt	Explanation
No.	Description				6	7 = (4*5*6)	8
-	2	3	4	5	6		
-							
116	R.C.C. FRAMED STRUCTURE						Maria Company (Company)
1 1	RCC framed structure upto 3 storeys						
					13,200.00	135,849,548.00	
	Floor height 3.35m	sgm	10,387.39	1.0	13,200,00	130,040,040	
. 0	Floors Extra for				150.00	1,555,108,50	CALL AND DESCRIPTION OF THE PARTY OF THE PAR
1.2	Every 0.3m additional height of floor	sqm	10,367.39	1.00	130,00	1,000,000	
1,2,11	above normal floor height of 3.35m.				150.00	447 930.00	For double height
100	Every 0.3m additional height of floor	sqm	248.85	12.00	150.00		areas
1.2.2	above normal floor height of 3.35m.						areas
			3,706.71	1,00	150.00	556,006.50	
1.23	Every 0.3m deeper foundation over	sqm	3,700.71	1,00			
	normal depth of 1.20m (on G.F. area				1		
	onty)		10,367.39	1.D	630,00	6,531,455.70	
1.2.4	Resisting Eerthquake forces		- A.D.		990.00	398,277.00	Entrance lobby
125	Larger Module over 35 sqm	sqn	402.30	1.0			
12.6	Fire fighting		40 207 30	1.0	300.00	1,244,086.80	40% of wel riser cos
1.4	With wet riser system	squ	10,367.39	1.0			as the building is
				1 1			within 15 m M.
			-	-			
			-	-		138,404,656.50	
	Total A (1.1.1.a + 1.2.1) =			-		9,177,756.00	0
	Total B (1.2.2 to 1.2.6) =	-					
		-	-				
	2 SERVICES	% of	A		@ 4%	5,536,186.2	6
2	1 Internal water supply & sanitar	y 70 OI	2				
	installations	% of	Λ		@ 5%	6,920,232.8	
2	2 External service connections	% of			@ 12.5%	17,300,582.0	16
2	3 Internal Electrical installations	76 OI	^				
2	4 Extra for	% 0	Δ.		@ 4%	5,536,186.2	26
2.4	.1 Power wiring & plugs	% 0	The state of the s		@ 0.5%	692,023.2	
2.4	.2 Telephone conduits	% 0	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW		@ 0.5%	692,023.	
2.4	4.3 Data network conduits	% 0	Section 19 Control of the least			36,677,233.9	
	Total C =	100				184,259,548.	
	Sub Total D = A+B+C				@ 61%	112,398,384	
	Add Cost Index (E = )					296,658,030.	02
	Total F = (E+D)						
						4 000 000	00
	3 Passenger lifts	4 T	os. 1	.00 1,0	1,800,000.0	1,800,000	00
	3.1 Passenger lift 13 passenger 1m/s G+				@ 619	6 1,098,000 2,898,000	00
	3.2 Add cost index					2,498,000	.00
	Total G =					200 550 000	92
	4 Grand Total (F+G) =	_			1	299,556,030	.04

ost	Cost of Airconditioning					Annexure z
2	Building	Unit	Area	Refrigeration Provided @ 1 TR/100sq.ft	Refrigeration Provided @ 1 Cost @ 35,000/ TR/100sq.ft TR	Explanation
-		8	4			2
	0.0000		- Control of the Cont			
	A C Areas					Faculty rooms &
-	Academic block	Sqm.	1.262.88	135.94	135.94 4,757,774.11	

# PUNJAB INSTITUTE OF TECHNOLOGY, NANDGARH, PHASE - 1 PRELIMINARY COST ESTIMATE

		AREA CALCU	JLATION	
	18.43 (20)		1	
		Junior	& Engineering College E	Block ,
		Covered Area (sqm)	Additional Area (sqm)	Plinth area 1(a)- 1(b) (sqm)
s.NO.		1 (a)	1 (b)	1 (c)
1	Ground Floor	3,490.00	216.71	3,706.71
2	First floor	3,290.00	(36.04)	3,253.96
3	Second Floor	3,075.00	331.72	3,406.72
4	Total Area	9,855.00	512.39	10,367.39
5	Total Ground Coverage	3,720.00	sqm	