Rotary Club of Kathmandu

District 3290, Nepal

Project Description

Date: **16. June 2007**

Submitted for Padborg-Kruså Rotary Klub, District 1460, Denmark

Project: Establishing of Science Laboratorium at Shree Chandra Joyti Lower Secondary School

Location: Sagar-Bakanje, Bakanje ward no 5, Solu-Khumbu District, Nepal

Preface

The school recently consisted of an old wing containing 5 small classrooms, and a wing containing office. Both were built in 1967 by Sir Edmund Hillary (first ascender of Mt. Everest). But mid December 2006 the old class room building were demolished and a new 4 room building were constructed by Rural Reconstruction, Nepal (RRN, an organization supported by many GOûs, INGOûs and NGOûs). And they will be completed during autumn 2007 with the support of Padborg-Krusaa Rotary Klub, Denmark.

In the late nineties two earthquake resistant buildings were constructed with the help of UNDP (United Nations Development Programme), but they were never fully completed, until autumn 2007, where they will be completed by Padborg-Krusaa Rotary Klub, Denmark.

Finally there is an old toilet, in which the pit has filled up, so it is in an incredible condition. In 2005 a sanitation project were initiated with the support of Nykøbing Mors Rotary Klub, Denmark, Rotary Danmark Hjælpefond and Himalayan Project. Because of lack of activity at a Kathmandu-based co-operator, only the Water Post in the schoolyard was constructed. The construction of toilet will be completed in September 2007.

In 2005 Himalayan Project, Denmark with the support of Venø Menighedsforening covered the earthen floors of the two newest buildings with stone slabs and supplied with 54 sets of students furniture and 7 teachers tables.

The school is headed by Headmaster Ang Dawa Sherpa, Sete, Bakanje 9, Solukhumbu.

The school in run as a Lower Secondary School; means up to 7. class. It has recently received approval running the Secondary level with 8. class. In the municipality it is the only school running Secondary level. It receives students from 7 schools. Gumdel Lower Secondary School with 50 students. Kenja Primary School with 75 students. Shringma Primary School with 40 students. Sagardanda Primary School with 60 students. Dachhu Preprimary School with 15 students. Changnyima Preprimary School with 20 students. And Chhimbu Primary School with 55 students (this school has been run by Skivehus Rotary Klub, Denmark since year 2000)

Seven teacherôs salaries are paid by Government and one (the 8. class teacher) is privately paid by Himalayan Project, Denmark and Køge Nord Rotary Klub.
Most educational materials are paid by government with supplementary delivery by Himalayan Trust (the organization supporting Sir Edmund Hillaryôs Schools) and occasional delivery by Himalayan Project, Denmark.
There are no school fees at the school, all education are free.
The approval running 8. class and the private employment of a 8. class English medium teacher, who educates in 6-8. class, has meant that more students are now enrolled in the school than before. This is most distinct in the secondary level after class 6. In 2005-6 the number of students was 104.
Number of students in 2006-7: 122

	Girls	Boys
1. class	12	6
2. class	3	6
3. class	4	4
4. class	7	6
5. class	2	6

	Girls	Boys
6. class	13	14
7. class	9	10
8. class	4	14
(2007-2008 8. class:		19 students)

The Reconstruction Process

1) The 39 years old classroom wing with 5 small rooms is already in this moment demolished and the new building is completed. Education has started in the raw buildings.
2) The sanitary unit supported by Nykøbing Mors Rotary Klub will be constructed adjacent to the schoolhouse, consisting of urinal, two toilet rooms, one bathroom and two pits. This part of the project has to be completed and reported to Rotary Danmarks Hjælpefond before end of October 2007.
3) The new schoolhouse **(1)** shall be boarded with inner wall ceiling and roof ceiling for insulation and noise reduction from monsoon rain and from adjacent classrooms. Each classroom shall be provided with basic educational materials like black board, maps and wall sheets. By 29. May 2007 the support from Padborg-Krusaa Rotary Klub for this purpose were transferred to Rotary Club of Kathmandu. The interior of the building will be completed during autumn-winter 2007-8 when wooden planks can be cut and dried after the monsoon.
4) The recent built two earthquake resistant schoolhouses shall be boarded with inner wall ceiling and roof ceiling for insulation and noise reduction from monsoon rain. Each classroom shall be provided with basic educational materials like black board, maps and wall sheets. By 29. May 2007 the support from Padborg-Krusaa Rotary Klub for this purpose were transferred to Rotary Club of Kathmandu.
5) One new schoolhouse shall be built in two levels with science laboratory in base level, half dug into the ground, and the dry first floor for computer education and library. As a good-will from RRN, they have described and budgeted this building for the school, handing over the project description for us.
6) The science-library building shall have sufficient and modern supply of necessary educational materials like science equipment, computers and books, as well as installations and furniture.

7) Half of the school compound is already surrounded by a compound wall, but around the southern demarcation it is missing, letting cows ruin the newly planted pine grove and grassy areas.
8) Installing solar heating for hot shower in sanitary complex building.
9) There will be expenses for administration, distribution of construction funds and also for a survey team visiting the project site to monitor and later to report the project. Himalayan Project, Nepal (HIPRON) has a Regular Runner Service visiting the area every 3 months, which will provide the cheapest and a sufficiently professional work. There will be charged 15% of the project budget of the points 5,6,7 for those expenses.

Project Details and preliminary Budget:

Point **1) 2) 3) 4)** is already being implemented by other subprojects.

Only point 5), 6) and 7) (and 9)) is the concern of this Project Proposal. And Padborg-Krusaa Rotary Klub, Denmark has agreed to go into the project if the Project Proposal can be completed by Sagar-Bakanje School and accepted by the Rotary Club before end of august 2007.

Point **8)** is still ahead and will be dealt with at a later occasion

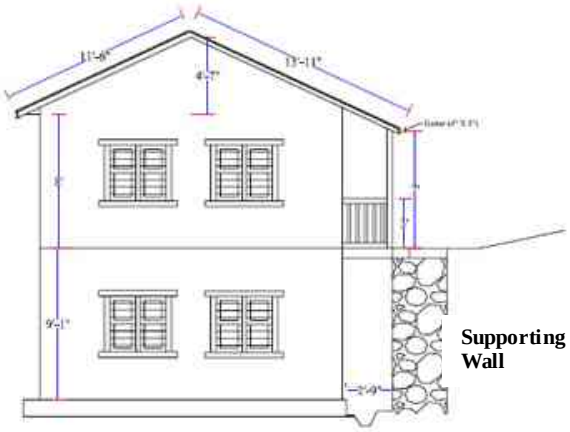
A) Land:

The school itself owns all the land concerned by this project.

B) Moving Soil:

Only limited quantities of soil shall be removed to give way for the construction. Most of this soil should probably be lifted up to give easy access way to the upper storey of the building. It might be advisory to construct ramps and access way by this surplus of soil. It will therefore be

most appropriate to ask unskilled labourers to do this work for salary.



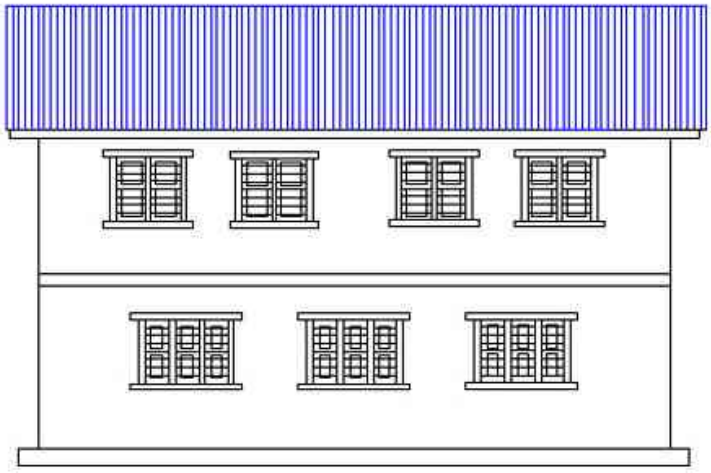
East Elevation

C) Supporting Walls:

A high and well build wall shall be constructed preventing the soil to fall down onto the back side of the building. Smaller supporting walls shall be built to give durable and easily accessible trails from the school playground to the Science Lab.

D) The Building Construction:

The building shall be constructed in two storeysô. A base storey where the back wall shall be dug down in the slope. Not into the slope, but leaving a meter space between the supporting wall and the building to prevent moisture to intrude. And an upper storey as a first floor, which will remain less damp and with a warmer environment for library and computers.



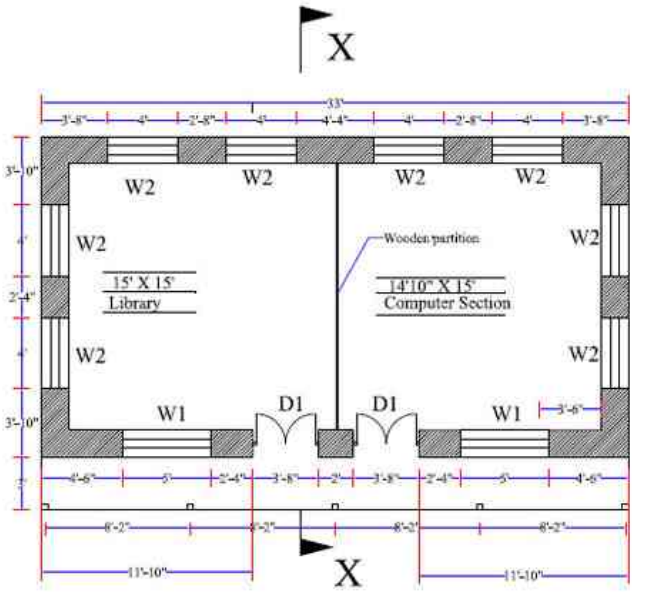
Back Elevation

In winter and monsoon periods the southern slope of the school compound has a very rough climate, and the wind comes unprotected and strongly sweeping in, and especially it is very strong when carrying rain. The rain will therefore hit hard, and can ruin a poorly built wall. The walls of the building therefore have to be built relatively expensive with dressed stones. Not necessarily exact hewn but anyhow leaving little space in between stones with mud mortar. It shall even be recommended to fill joints with cement mortar for longer durability.

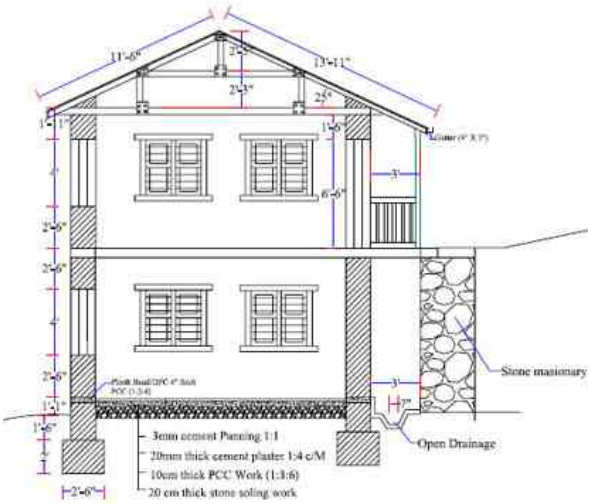
There will also be problems with windows on this south-western side, which will rot if water is pressing in under the frames. But as there has to be windows at least in base storey it shall be constructed carefully, so water can drain off, and there can be constructed shieldings, holding out on top of the windows. In the upper storey the windows can be omitted on the south-western side if sufficient skylight plates are incorporated in the roof.

Front Elevation

Ground floor shall be laid with stone slabs and first floor from heavy wooden planks.

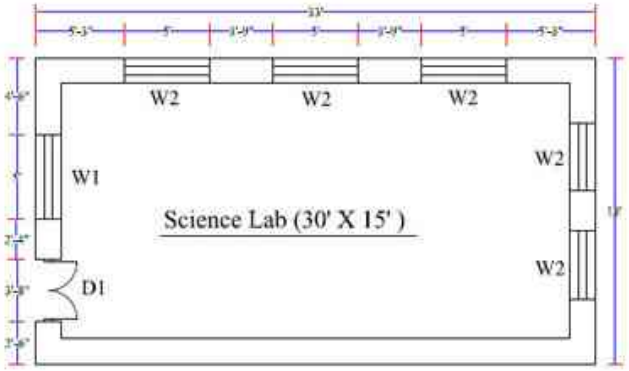


First Floor Plan



Section at X - X

E) Interior of the Construction:



Ground Floor

The building shall of course have wooden boarding on all walls. The top ceiling in base storey with heavy planks for noise reduction from the floor above.
In upper storey with roof wooden boarding except at skylight.
And there shall be a double partition wall for noise reduction, between the computer room and library.

For budget details on B, C, D & E is referred to Appendix 1, 2 & 3.

F) Science Laboratorium:

a) In base storey several cupboards and cabinets shall be made to contain science equipment. Heavy tables shall make all kinds of scientific experiments possible. There shall be independent and primary electric line for electric experiments.

b) Various equipment for the science laboratory shall be purchased. In **Appendix 4** is attached a list which is drawn up by Pikey Lower Secondary School, Loding, Thamakhani VDC. This list should contain sufficient materials for a school at same level, like Sagar-Bakanje School.

G) Computers:

In the Computer Room on first floor there shall be installed five computers for educational purpose, additionally to a Main PC situated at Office for official use. The Computer Room and

Office Room shall be equipped with furniture and installations as mentioned in paragraph 6. Be also aware that these installations and furniture has to be settled and installed before the process of preparing the PCôs can start. The school shall by own means give message for SeaGate Institute when all preparations have been completed.

1) Conditions.
    a. Seagate Computer Institute, Koupondole, Lalitpur, shall be the primary technical supporter and provider. The manager Madhur Shrestha is a member of Rotary Club of Lalitpur and has cooperated in several similar Rotary projects.
    b. The involved Rotarians shall have access to the yearly account report of the School.
    c. The computers shall be kept at low humidity and as dust free as possible
2) Programmes:
    a. Windows XP - b. Office XP - c. Acrobat Writer - d. WinZip - e. Photoshop CS - f. Macromedia Freehand - g. Pagemaker
3) Hardware:
    a. One main computer (situated in Office)
        i. Pentium IV ï Intel mainboard - ii. 1 GB RAM - iii. 160-200 GB HD - iv. Floppy disk - v. DVD drive and burner - vi. Card reader - vii. USB Ports - viii. Monitor - ix. Keyboard - x. Optic mouse
    b. Five workstations (situated in Computer Room)
        i. Pentium IV ï Intel board - ii. 512 MB RAM - iii. 160 GB HD - iv. Monitor - v. Keyboard - vi. Optical mouse
    c. Printer (situated in Office)
    d. Scanner (situated in Office)
    e. Network Card and cables
    f. Four batteries and one UPS
4) The budget for this project will be:
    a. **8.000 Rs** for Program Installation
    b. **60.000 Rs** for main Computer
    c. **200.000 Rs** for five Workstations
    d. **15.000 Rs** for scanner and printer
    e. **8.000 Rs** for Network hardware
    f. **20.000 Rs** for batteries and UPS
    g. **6.000 Rs** for transportation with truck KTM to Bhandar
    h. 0 Rs for transportation Bhandar to Sagar-Bakanje by schoolôs own means
    i. **30.000 Rs** for set-up in Kathmandu ï set-up in Sagar-Bakanje ï basic training for concerned personnel at the School (5-10 persons) ï including personal transportation and salary but excluding fooding and lodging in Sagar-Bakanje, which is on school.
    j. If there is extra budget, it will be spent for training.

    The total budget for Software and Hardware: 347.000 Rs

5) All other expenses will be borne by Shree Chandra Joyti Lower Secondary School
    a. SeaGate provides all repair and software update at minimum cost.
    b. This can be done by remote access from KTM for 500-1000 Rs for simple repair, only when school establish telephone access
    c. Training in use of computer and mailing for local inhabitants in Sagar-Bakanje.

6) Before the Rotary Club and SeaGate proceeds in this project, the school has to complete the following preparations included in the construction budget.
    a. Electricity to be installed by primary line with plugs and switches in Office Room and in Computer Room.
    b. Tables and chair for five workstations and Cupboard for equipments.
    c. One table and chair for main computer in Office

    Lump Sum Budget for this Preparatory part: 30.000 Rs

7) Before the Rotary Club and SeaGate proceeds in this project, the school has to prepare carefully a plan on how the school will carry through the maintenance cost in future. This plan shall contain a plan on how to secure that there will always be a sufficient guarantee fund available for immediate repair. The amount shall be discussed with SeaGate Institute.
8) Schedule
    a. SeaGate will proceed in preparing the hardware and software as soon as the money for the purpose is available
    b. When SeaGate has completed their work they will call Sagar-Bakanje School representative for Kathmandu to give the last instructions
    c. Then this person will follow the hardware and all equipment from Kathmandu with truck for Bhandar and with porters for Sagar-Bakanje.
    d. Then SeaGate will send two technicians to complete the set-up and give technical training for specified persons.
    e. The School will arrange a special inauguration ceremony.
9) Popular training
    a. SeaGate will provide training on any software deemed essential by the school on its own cost.
    b. This training is not included in the Rotary subsidies.

H) Library:

1) In the Library Room, there shall be furniture with chairs and tables where students can sit reading, and a teachers desk with drawers and chair and a Card Index Box for registering the books and the Borrowers. There should be 2-3 glass-fronted cupboards for protecting special valuable books. And nicely manufactured book shelves on all walls. There should be a space between the wall ceiling and the bookshelves to make ventilation possible behind the books as they otherwise will attract moisture and become damp and root.

Lump Sum Budget for Furniture in Library: 45.000 Rs

2) There shall be produced a list of books which the School Managing Committee will like to have in the Library, including transportation expenses.

Lump Sum Budget for Books in Library: 60.000 Rs (which amount will not be released before a ñList of Booksò is provided by the School).

3) Through Rotary there shall be made an attempt to have books for library through Rotarian Robert L. Hartsfield, District 5190, Nevada, U.S.A. e-mail: bhfield@sierra.net
This Rotarian can provide a great volume and wide spectrum of second hand books from private homes and libraries in America. The school shall agree in trying to approach this Rotarian to supply the Library with magnificent variation. There shall be made arrangements for transportation of these books all the way to the school, by the schoolôs own economy.

I) Compound Wall:

Some parts, the village side of the school already are fenced with a stone wall, but the southern side is unprotected. Few years ago the school planted out the pine saplings from the School Tree Nursery below the place, where the science lab is going to be build. This is unprotected, and cattle are roaming freely there ruining the area. Now the wall shall be completed so there will be an unbroken wall all around the school.

Lump Sum Budget for Compound Wall: 250.000 Rs (which amount is deemed in the high end, but will be accounted according to the stones required and the general labour costs for this kind og construction)

J) Administration, Monitoring and Reporting:

There will be expenses for administration, distribution of construction funds and also for a survey team visiting the project site to monitor and later to report the project. Himalayan Project, Nepal (HIPRON) has a Regular Runner Service visiting Sagar-Bakanje every 3 months, which will provide the cheapest and a sufficiently professional work. There will be charged 15% of the total project budget for those expenses, which will be transferred to Himalayan Project, Denmark.

BUDGET SUMMARY:

By 30. April 2007 the currency rates were: 1,0 US$ = 5,48 DKR = 64,90 NRS / 1,00 DKR = 11,84 NRS

To be transferred:	Summer 2007	When ready
A) Land	0 NRS	
B) Moving Soil	Ź	
C) Supporting Walls	Ź	
D) The Building Construction	Ź	
E) The Interior of the Construction	Ÿ . 636.000 NRS	
F) Science Laboratorium		
1. Furniture and Installations	36.000 NRS	
2. Science Equipments		35.000 NRS
G) Computers		
1. Hardware and Software		347.000 NRS
2. Furniture and Installations	30.000 NRS	
H) Library		
1. Furniture and Installations	45.000 NRS	
2. Books		60.000 NRS
I) Compound Wall	250.000 NRS	
SUBTOTALS	997.000 NRS	442.000 NRS
J) Administration, Monitoring, Reporting	150.000 NRS	66.000 NRS
(In DKR:	12.600 DKR	5.600 DKR)
TOTALS FOR TRANSFER	1.147.000 NRS	508.000 NRS
Totals for Transfer DKR	96.500 DKR	43.000 DKR

TOTAL BUDGET ..... 1.655.000 NRS

TOTAL BUDGET ..... 25.500 US$

TOTAL BUDGET ..... 139.500 DKR

Budget Release Schedule:

1.) The School is ready to receive the first release as soon as Rotary Club of Kathmandu is ready to receive it and as soon as Padborg-Kruså Rotary Klub has approved the Project Description and is ready to transfer the amount. But to make sure that the project initiates s in a proper and timely way it recommended, that an **project-amount of 45.000 DKR (534.000 NRS) and administrative amount 12.500 DKR** is transferred as soon as the project description is approved.

2.) The second half of the first release of **project amount, 39.000 DKR (463.000 NRS)**, can be transferred, when the school have shown that they have utilized the first half for itôs purpose, which should be expected to happen when Kurt Lomborg visits the location I October 2007.

3.) Second release, **project amount on 37.400 DKR (442.000 NRS) and administrative amount 5.600 DKR,** will only be transferred, when the buildings, furniture and installations have been completed and reported, as well as the final lists have been produced.

Discussion:

During the construction process the Construction Committee shall keep account showing the actual expenditures in details and on a day to day basis. All expenditures shall be followed by a receipt with all details mentioned in an easy readable way and with signature.
The account book shall be entered in a daily basis, so HIPRON Runner Service or any other representatives from the involved Rotary Clubs or Himalayan Project at any time can be presented for a real time and updated account.
It shall be kept in mind that all above calculations and budget amounts are only guidelines.
The Construction Committee shall work honestly and sincere with the funding. And all construction details will be controlled according to the details mentioned in the account.
On their wish the involved Rotary Clubs shall have access to the total Account of the School in the past and several years ahead.

Postscript

With a support from Padborg-Kruså Rotary Klub on above mentioned details and above mentioned amounts the Science Laboratory will receive the finish which will make it a quality construction, which can offer students and teachers the best environment for future functionality and academic surroundings. And we are also aware that this academic superstructure is ahead of any similar school in the district. All the teachers and villagers shall be aware of this and utilize it and develop the school according to this standard.

We are all aware about the working procedures of Rotary, which regularly will need some time and timeframes to work in. The School Committee is aware that we shall work fast and without delay as soon as the first funds release has arrived at the schools account in Salleri. We are also aware that there canôt be given green light for any part of the construction before August 2007.

In the sincere hope that your club will respond positive to this application for supporting the future development of the students of the remote village of Sagar-Bakanje, we thank you for the interest which you have already shown to this very necessary and prosperous project.

The project will be managed in Sagar-Bakanje under the responsibility of
Headmaster Ang Dawa Sherpa
Shree Chandra Joyti Lower Secondary School
Bakanje ward 4, Solukhumbu, Nepal

The Bank Account of the School is:
Shree Chandra Joyti Lower Secondary School Current Account **no: 94**
Rastriya Banijya Bank Salleri branch

The project will be monitored and reported by
Runner Service of Himalayan Project, Nepal (HIPRON)
By Namgyal Jangbu Sherpa
P.O.Box: 15142, Kathmandu, Nepal
Email: nepalhelp@enet.com.np
Tel.: 00977-1-444 60 14

The administrative amounts will be transferred to
Himalayan Project anfordring konto nr. 9260 2651842339
Sparbank, Skive

The project will be supervised by:
rtn. Kurt Lomborg, Skivehus Rotary Klub, District 1440, Denmark

chairman of Himalayan Project, Denmark (www.nepalhelp.dk)
Kjeldbjergvej 34
DK-7800 Skive
email: klomborg@post11.tele.dk
Tel.: 0045-97 54 53 08

and:

Rtn. Bishnu Subedi, Rotary Club of Kathmandu, District 3290, Nepal
Rotary Hall of Kathmandu
Kathmandu, Nepal
Tel.: 0977-1-4245783
Email: talisman@wlink.com.np
Tel.: 00977-98510 24103

Computers will be managed by:

Rtn. Madhur K. Shrestha, Rotary Club of Lalitpur, District 3290, Nepal
SeaGate Computer Institute
POB 8975, EPC 1557
00977-1- 5537231 / 9841211123
seagate92@wlink.com.np

Funds to be transferred to and through:
Rotary Club of Kathmandu - Current Account # 85
Rastriya Banijya Bank - Branch: Thapathali, Kathmandu
C/O Rastriya Banijya Bank - Main Branch Office
Super Market Building, New Road, Kathmandu, Nepal
Tel.No. 00977-4230590 - Fax No. 00977-4228337
Telex no.: 2247NP / 2354NP - SWIFT: no code
Via: Citibank NA., New York
Chips No. CP 0008 - SWIFT No. CITIUS33 - FED ABA No. 021000089

Appendix 1: Details on Quantities

SN	Discription	No.	Length	Bredth	Height	Quantity	
1	**E/W in Excavation work**		ft	ft	ft		
	E/w in excavation for site preparation	1	40	20	4	3200	
	E/w in excavation in L/W foundation	2	34,00	2,50	3,50	595,00	
	E/w in excavation in S/W foundation	3	14,00	2,50	3,50	367,50	
	E/w in verandah	1	34,00	1,50	1,00	51,00	
				Total		**119,30**	**m^3**
2	**Stone masonary with M/M**						
	At foundation Ground floor						
	1st footing L/W	2	34,00	2,50	2,00	340,00	
	S/W	3	14,00	2,50	2,00	210,00	
	Support wall	1	34,00	33,00	1,00		
	2nd footing L/W	2	33,00	1,50	1,50	148,50	
	S/W	3	14,50	1,50	1,50	97,88	
	Support wall	1	33,00	2,00	1,50	99,00	
	At super structure						
	L/W	2	33,00	1,50	9,16	906,84	
	S/W	3	15,00	1,50	9,16	618,30	
	At verandah	1	33,00	1,50	1,00	49,50	
	Support wall	1	33,00	2,00	8,50	561,00	
	At First floor						
	L/W	2	33,00	1,50	8,83	874,17	
	S/W	2	15,00	1,50	8,83	397,35	
	Gable	1	18,00	1,50	3,50	94,50	
	Drain side wall	2	36,00	1,00	1,00	72,00	
	Deduction						
	Door-D1	-3	3,50	1,50	6,67	-105,05	
	Window-W1	-8	5,00	1,50	4,00	-240,00	
	Window-W2	-4	4,00	1,50	4,00	-96,00	
				Total		**114,04**	**m^3**
3	**RCC work with (1:2:4) PCC**						
	DPC for L/W	2	33,00	1,50	0,330	32,67	
	DPC for S/W	3	15,00	1,50	0,330	22,28	
				Total :-		**1,56**	**m^3**
4	**Stone Soling Work**						
	At Science lab	2	30	15	0,66	594,00	
	Drain	1	38	0,58	0,66	14,55	
	Verandah only	1	33,00	3,00	0,66	65,34	
				Total		**19,08**	**m^3**
5	**PCC (1:3:6) for flooring work**						
	At Science lab floor	1	33,00	15,00	0,25	123,75	
	Verandah only	1	33,00	3,00	0,25	24,75	
	Support wall top	1	33,00	1,50	0,25	12,375	
				Total		**4,55**	**m^3**
6	**(1:4) Cement plastering work**						
	At Science lab floor	1	33,00	15,00	-	495,00	
	Plaster drain plate	1	38,00	0,58	-	22,04	
	Drin wall side	2	38,00	-	1,00	76,00	
	At back side wall	1	33,00	-	0,66	21,78	
				Total		**57,03**	**m2**
7	**Flush Pointing outer face of building (1:3) C/M**						
	L/W	2	33,00	-	16,58	1094,28	
	S/W	2	18,00	-	16,58	596,88	
	At Gable wall	2*.5	18,00	-	3,50	63,00	
	Deduction						
	Door-D1	-3	3,50	-	6,67	-70,04	

	Window-W1	-3					
	Window-W2	-13	4,00	-	4,00	-208,00	
				Total		**137,19**	**M^2**
8	**3 mm punning work (1:1) C/M**						
	At Science lab floor	1	33,00	15,00	-	495,00	
				Total		**45,92**	**m2**
8	**Woodwork for chowkath**						
	Door	6	16,50	0,410	0,33	13,395	
	W1	6	27,50	0,140	0,33	7,623	
	W2	26	20,00	0,330	0,33	56,628	
				Total		**2,198**	**m^3**
10	**Woodwork for ceiling (Top ceiling 1" thick, side frame 1.5" thick)**						
	At top Celling work in science Lab	1	30,00	15,00	-	450,000	
	At Side Celling work in science Lab	1	90,00	-	8,50	765,000	
	At top Celling work in Second Floor(Computer & Libeary room)	1	30,00	15,00	-	450,000	
	At side Celling work in Second Floor(Computer & Libeary room)	2	60,00		8,08	969,600	
	Side frame for door	6	6,50	1,50	-	58,500	
	Side frame for windows-1	16	4,00	1,50	-	96,000	
	Side frame for windows-2	8	4,00	1,50		48,000	
				Total		**263,182**	**M^2**
11	**Wood work for shuttring**						
	Door	3	3,00	-	6,50	58,50	
	W1	3	5,00	-	4,00	60,00	
	W2	13	4,00	-	4,00	208	
				Total		**24,72**	**M^2**
12	**Other woodwork**						
	Principle Rafter+Gable rafter	7	25,33	0,25	0,33	14,63	
	Main beam	5	16,33	0,33	0,42	11,24	
	Sub beam	5	9,00	0,25	0,33	3,71	
	Queen Post	15	1,50	0,25	0,33	1,86	
	beam	30	18,00	0,33	0,41	73,06	
	Parlin	9	36,00	0,17	0,25	13,77	
	Verandah Post	5	7,50	0,33	0,33	4,08	
	Verandah Beam	1	36,00	0,33	0,33	3,92	
	Relling beam	2	33,00	0,25	0,33	5,45	
	Relling	40	3,00	0,17	0,25	5,10	
	Roof Band	2	144,00	0,25	0,33	23,76	
	1.5" Thick plank wood lintel for doors	3	3,50	1,50	0,13	2,05	
	1.5" Thick plank wood lintel for windows-1	3	5,00	1,50	0,13	0,17	
	1.5" Thick plank wood lintel for windows- 2	13	4,00	1,50	0,13	0,60	
	Nuskat for wall	6	96,00	0,25	0,17	24,48	
				Total		**5,319**	**M^3**
13	**1.5"Thick Eaves board work**	1	98,0	0,67	0,00	65,37	
				Total		**6,07**	**M^2**
14	**CGI Sheet Roofing work**						
	Front Side	1	36,00	13,91	-	500,76	
	Rear Side	1	36,00	11,50	-	414,00	
				Total		**85,01**	**M^2**
16	**Painting works on outer faces**						
	Doors	3	3,5	-	6,5	68,3	
	Window-1	3	5,0	-	4,0	60,0	
	Window-2	13	4,0	-	4,0	208,0	
	Verandah post	6	7,5	1,3	-	60,0	
	Eaves board round	1	98,0	0,7	-	65,3	
				Total		**42,82**	**M^2**

Appendix 2: Details on Labour and Materials

S.N	Description of Job	QTY	Units	Labour		Material						miscelleneous		
				Skilled	Unskilled	Stone	Cement	Agg.	Sand	Plank	Wood			
				MD	MD	M3	Bag	M3	M3	M2	M3	Description	QTY	Unit
1,0	E/W in Excavation work	119,30	m^3	-	83,51	-	-	-	-		-	MS Rod 10mm dia	250	Kg
2,0	Stone masonary with dressing wall	114,04	m^3	171,06	171,06	125,45	-	-	-	-	-	Tower bolt 4"	24	Nos
3,0	Stone Soling Work	19,08	m^3	9,54	28,62	20,99	-	-	-	-	-	L drop 6"	2	Nos
4,0	RCC for DPC (1:2:4)	1,56	m^3	0,78	7,00	-	9,96	1,38	0,69	-	-	Hinge 3"	24	Nos
6,0	Woodwork for chowkath	2,20	m^3	74,74	7,47	-	-	-	-	-	2,308	Hinge 6"	12	Nos
7,0	Wood work for shuttring	24,72	M^2	160,6911	16,06911	-	-	-	-	25,958		Window handle 5"	12	Nos
8,0	Other woodwork	5,32	m^3	74,47	7,98	-	-	-	-		5,585	Door Handle- 6"	4	Nos
9,0	Eaves board work	6,07	m^2	1,09	0,91	-	-	-	-	6,3787	-	Topi Kila	10	Kg
10,0	CGI Sheet Roofing work	85,01	m^2	17,00	10,63	-	-	-	-	-	-	Nail 4"	25	kg
12,0	PCC (1:3:6) for Class room and Verandah	4,55	m^3	2,28	20,50	-	20,041	4,054	2,03	-	-	Nail 3"	30	kg
13,0	(1:4) cement plaster 20 mm thick	57,03	m^2	12,55	12,55	-	9,2	-	1,25	-	-	Wood Primer	10	Lit.
14,0	(1:3) Cement pointing	137,19	m^2	13,72	13,72	-	8,3958	-	0,86	-	-	White enamel	10	Lit.
15,0	(1:1) cement puning	45,92	m^2	4,59	4,59	-	3,08	-	0,11	-	-	Green Enamel	10	Lit.
16,0	Enamel Painting work	42,82	m^2	21,41	21,41	-	-	-	-	-	-	CGI Sheet 8' long	17	Sheet
17,0	woodwork for celing	263,18	m^2	47,37	39,48	-	-	-	-	276,341	-	CGI Sheet 7' long	17	Sheet
												CGI Sheet 6' long	34	Sheet
	Total			**611,30**	**445,49**	**146,43**	**50,71**	**5,44**	**4,94**	**308,68**	**7,89**			

Appendix 3: Total Cost Summary

S.N.	Description	Quantity	Units	Rate (Rs)	Amount (Rs)
A.	**Local material.**				
1	Stone Local	146,4	M3	400,00	58573,68
2	Aggregate local	326,3	Tin	30,00	9788,89
3	Sand from Likhu briver	296,6	Tin	50,00	14831,27
4	Plank wood	3327,5	ft2	20,00	66550,84
5	Battan Wood	278,8	cft	130,00	36244,21
				Sub-Total	**185988,89**
B.	**Non-local material.**				
1	Cement-53 G	50,71	Bag	750	38031,64
2	MS Rod 10 mm dia	190	kg	75	14250,00
	plain rod 10mm dia 4' Long	95	Nos	56	5320,00
	plain rod 10mm dia 5' Long	24	Nos	70	1680,00
3	Tower bolt/Cheskini 6" brass	81,0	No	63	5103,00
4	kabja/Hinge 3" Brass	75,0	No	20	1500,00
5	kabja/Hinge 6" brass	20	No	40	800,00
6	L drop 12" brass	3	Set	250	750,00
7	Door Handle Brass 6"	8	No	45	360,00
8	Handle Brass 5"	38	No	42	1596,00
9	Scrup1 1/2"	6	Pkt	90,00	540,00
10	Nail 2"	25	Kg	85,00	2125,00
11	Nail 3"	30	Kg	85,00	2550,00
12	Nail4"	25	Kg	85,00	2125,00
13	Fevicol	10	Lit.	170,00	1700,00
14	Wood primer	10	Lit.	240,00	2400,00
15	White Enamel asian	10	Lit.	350,00	3500,00
16	Green Enamel asian	10	Lit.	350,00	3500,00
	26 Gauge Colour CGI Sheet/Red				
27	6 ft long	34,00	Sheet	700,00	23800,00
28	8 ft long	17,00	Sheet	940,00	15980,00
29	7' ft long	17,00	Sheet	820,00	13940,00
30	Plastic Transpirant Sheet 6' long	2,00	Sheet	900,00	1800,00
31	Plastic Transpirant Sheet 8' long	1,00	Sheet	1200,00	1200,00
32	Plastic Transpirant Sheet 7' long	1,00	Sheet	1100,00	1100,00
33	Ridge cover 6' long	7,00	nos	270,00	1890,00
34	Plane sheet	5,00	Sheet	400,00	2000,00
35	Cap Nail	10	Kg	110,00	1100,00
36	B Washer	8	Pac	23,00	184,00
				Sub-Total	**150824,64**
C.	**Manpower.**				
1	Skilled	611,30	MD	250	152825,24
2	Unskilled	445,49	MD	150	66823,70
				Total On Man power	**219648,94**
D.	**Transportation expenses**				
	CGI Sheet				

1	Giri to Bhakanje	489	Ft.	12	5868
	Cement &other materials				
1	Giri to Bhakanje	3390,00	Kg	12	40680,00
				Total on Transportation	**46548,0**
				Total Cost	**603010,5**
				Contingencies 5% on Total Cost	**30150,5**
				Other Administration Cost	**3000,0**
				Grand Total	**636161,0**

Appendix 4: Science equipment

S.No.	Particulars	Quantity	Amount
1	Measuring Cylinder	2 Sets (Big- 500ml & small-250ml)	Rs.1,605 Rs.1,170
2	Round Bottom Flask	3 Sets (250 ml)	Rs.510
3	Glass tube	4	Rs. 80
4	Stand	3	Rs. 2,250
5	Spirit lamp	2	Rs. 130
6	Pulley	2	Rs. 130
7	Spring balance	2	Rs. 300
8	Thermometer	3	Rs. 375
9	Filter paper		Rs. 110
10	Magnet		Rs. 110
11	Tripod Stand	3	Rs. 255
12	Beaker	4 (500 ml)	Rs. 688
13	Hand lens	2	Rs. 150
14	Prism	1	Rs. 140
15	Plastic tube		Rs. 10
16	Jasta ko pata (silver foil)		Rs. 85
17	Aluminum		Rs. 375
18	Cellulose		Rs. 250
19	Silica gel powder		Rs. 340
20	Fitkiri	5	Rs. 50
21	Balance machine	2	Rs. 9,000
22	Test tube	6	600
23	Bell jar		Rs. 250
24	Compass		Rs. 55
25	Microscope	1	Rs. 7500
26	Clinical thermometer		Rs. 20
27	Zinc Sulphate		Rs. 450
	OTHERS		Rs. 6.000
TOTAL			**Rs. 32,988**
Transportation			**Rs 2,000**
TOTAL			**Rs. 35,000**