
NON-STRUCTURAL MITIGATION INVENTORY REPORT
Government School, Ludlow Castle

DECEMBER 2005

**Submitted by SEEDS of INDIA for
GeoHazards International & Government of Delhi
Delhi Earthquake Safety Initiative for Lifeline Buildings**

NON-STRUCTURAL MITIGATION INVENTORY REPORT

Government School, Ludlow Castle

Inventory of falling, sliding, colliding hazards/ building contents in Government School, Ludlow Castle.

As part of the project, Delhi Earthquake Safety Initiative of Lifeline Buildings, the project team carried out a comprehensive survey of all falling hazards and building contents in the Government School at Ludlow Castle, Delhi.

The work of preparing this inventory was initiated as part of the “hazard hunt” carried out during the one-day workshop at the school premises on the 4th of May, 2005. It has subsequently been completed by an additional visit to the school on 20th May, 2005.

A photo documentation of the various rooms has been carried out. This has not been appended to this file due to size constraints.

After suitable modifications, this report would be shared with the “School Site Team” due to meet in the school during the week of May 23rd. During the School Site Team meeting, we intend discussing this compilation, and get their views and feedback. This would help finalize actions for the next stage.

Non Structural Mitigation Itemized Inventory Form - Room No. 1

Room /Location **Office Room No 1**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Profes -sional help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
12 Cabinets (6 feet *3.5 feet)	√			H	200		1		48			√
1 large Fire Extinguisher		√		L	3		6		1			√
Power Box with Emergency Siren			√	M	10		6		1			√

Device type :

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 2

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Profes sional help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
One computer			√	h	15		2					
3 cabinet (Iron) 6 feet *3.5 feet	√			h	100		1,		12	One cabinet life threatening		
1 wooden Frame cabinet with memento (8feet *4feet)		√		h	300		1, 3		8, 9			
1 wooden frame attached cabinet with memento (8feet *4feet)		√		h	200		8, 10		10, 4, 12			
1 Wall Clock	√			h	1		17			Double sided tapes		
2 large Display Board		√		l	10		1	s	8			
2 Small Display Board		√		l	5		1		6			
Gate opening inside	√			h			15		8			

Room /Location **Principal Room** Contract Person : **Mr B K Sharma**

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 3

Location: Main Meeting Hall

Device type

1 L Brackets			2 Straps and Clips			3 Mechanical Latches			4 Magnetic Latches			
5 Shelf Mats			6 Chain			7 Hook			8 Shelf Restraints			
9 Storage Coverings			Risk Type		Priority		Device		Notes		Self	Need
13 Acrylic mount/mono filament			14 Fire Suppression Equipment		H/M/L or 1,2,3	Weight (including contents) in KG	15 Door opening outwards		16 Emergency lighting			Professional help
(Full Description)		Life Safety	Economic Replacement cost estimate	Operational Continuity			Re-locate	Type	Size	No		
6 Speakers attached with wall			√		m	7		6		36		
3 Gates (Two Opening Out side) in two sides (Less and small Exits for 400 People)		√			h	-					Door to be widened and one extra door to be added	√
Curtain Rod			√		l	3						
6 Big Picture		√			h	5		1		24		√

Non Structural Mitigation Itemized Inventory Form - Room No. 4

Room /Location : **Physics Lab**

Contract Person : **R.K Jain**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
3 Cabinets (6 feet *3.5 feet)	√			h	150		2		12			√
3 Wooden Cabinet (3'*6'feet)	√			h	125		18		12			√
1 LPG Gas Cylinder		√		h	25		6		1			√
22 Hanging Photograph	√			H	1		1	small	88			
1 Fortien Barometer	√			M	4		1		4			√
2 Medium Fire Extinguishers		√		h	5		6		2			
1 Small Fire Extinguishers		√		h	3		6		1			

Device type

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 5

Room /Location : **Library**

Contract Person : **Madhu Joshi**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
8 Cabinets Iron (6 feet *3.5 feet)	√			h	200		2	LARGE	32			√
25 Wooden frame glass window book self (6.4feet *3.Feet)	√		√	h	200		18 8	1	100 30			√
2 Large Fire Extinguishers	√			h	10		6		2			√
1 medium Fire Extinguishers	√			h	5		6		1			
1 Small Fire Extinguishers	√			h			6		1			√
One exit opening inside and Liberian table blocks the exit	√			h						Table should be removed and add another exit	√	

Device type

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 6

Room /Location : **Primary Teachers Staff Room**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
12 Cabinets (6 feet *3.5 feet)	√			h	100		Type	Size	#			√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 7

Room /Location **Examination Room**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
7 Cabinets Iron	√			h	100		2		28			√

Device type

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 8

Room /Location **Staff Room no 1**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
4 Cabinets	√			h	100			M	32			√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 9

Room /Location **Staff Room No 2**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
9 cabinet	√			h	100		18		36	Screw at the back		√
1 Clock		√		l	1		7					√
Water tank		√		m	50					Lateral support needed ,Engineers to be consulted		√
Hot case		√		l	10		2		1	Table to wall with strip		
Entry door should be open outwards	√											

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Structural Mitigation Itemized Inventory Form - Room No. 10 / 11

Room /Location **Room No 3** N/A/

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locat e	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 12

Room /Location **VKS Room**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
2 Cabinet	√			h	100		2		8			√
3 Cabinet wooden	√			h	150				12			√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 13

Room /Location **Chemistry Lab**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
2 Fire Extinguisher		√		h	10		6		2	B and c		√
4 Gas Cylinders	√			h	30		6		4			√
Shelf Support	√			h			8					√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others			

Non Structural Mitigation Itemized Inventory Form - Room No. 14

Room /Location **Bio Lab**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
Exhibits	√			h								√
6 Cabinets	√			h	100							√
Display on cabinets	√			h	2							√
Fire Extinguisher		√		h	10							√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others	18 Screws		

Non Structural Mitigation Itemized Inventory Form - Room No. 15

Room /Location **Computer Room**

Item (Full Description)	Risk Type			Priority H/M/L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professio nal help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
2 Cabinets	√			h	100		1	8				√
20 monitors		√		m	10		2	40				√
20 CPUs		√		m	10		2	40				√
2UPS		√		m	15		2	6				√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others	18 Screws		

Non Structural Mitigation Itemized Inventory Form - Room No. 16

Room /Location **Corridors**

Item (Full Description)	Risk Type			Priority H/M/ L or 1,2,3	Weight (including contents) in KG	Re locate	Device			Notes	Self	Need Professional help
	Life Safety	Economic Replacement cost estimate	Operational Continuity				Type	Size	No			
Fire Extinguisher	√			h	10					Sand Buckets, 24 Fire Extinguishers		√
4 Cabinets	√			h	100					Replace		√
Main Power Plug and 12 Power plug, 6 Power Plug (toilets)	√			m	20					Signage and b and c type fire extinguishers to be in the vicinity		√
8 Display Boards			√	h	15		1		32			√
5 Big Picture				h	5		1		20			√
60 Gates				m			15		60			√

Device Type:

1 L Brackets	2 Straps and Clips	3 Mechanical Latches	4 Magnetic Latches
5 Shelf Mats	6 Chain	7 Hook	8 Shelf Restraints
9 Storage Coverings	10 Wax	11 Padding	12 Window Covering or film
13 Acrylic mount /mono filament	14 Fire Suppression Equipment	15 Door opening outwards	16 Emergency lighting
17 Others	18 Screws		

Review Meeting 1

Non Structural Mitigation, Ludlow Castle School

10th June, 2005

Venue: Ludlow Castle School

Present: Mr. B.K. Sharma. Mr. S.P Singh, Mr. R.S Jain, Mr. Jog Raj Malik, Mrs. Madhu Joshi, Mr. S.S. Sirohi
Mr. Bhupesh Chug, Mr. Sanjeev Kumar, Mr. Vinod Sharma, Vidyalay Kalyan Samiti, Mr. Hari Kumar GHI,
Mr. Rajesh Kaushik SEEDS. Ms. Nupur SEEDS

Agenda of the Meeting:

With reference to the work being carried out on Non Structural Mitigation for the Ludlow Castle School Building, this meeting was organized for presenting the draft report for Non Structural Mitigation in the school. The session also had open discussions and recommendations from the teams on possible solutions identified for the school. A future plan of action was prepared by the teams.

Duration: 2 hrs, 1100hrs to 1300hrs.

Minutes of the Meeting

1. The meeting started with an Introduction and announcement of members by Nupur. The project updates were shared and also some basics of Non Structural Mitigation were touched upon for refreshing in their minds, the presentation made by Marla last month.

Teams:

a. Advisory Team

Members:

Mr. B.K. Sharma, Principle

Mr. Vinod Sharma, School Welfare Committee

Mr. Sanjeev Kumar

b. Implementing Team:

Members:

Mr. S.P Singh (PGT Drawing)
Mr. R.S Jain (Teacher Commerce)
Mr. Jog Raj Malik (Incharge Biology Lab)
Mrs. Madhu Joshi (Incharge Library)
Mr. S.S. Sirohi (Science Teacher)
Mr. Bhupesh Chug (Physical Education Teacher)
Mr. Verma (Incharge Chemistry Lab)
Mr. R.K jain (Incharge Physics Lab)

2. Power Point presentation by Rajesh, on Non Structural Mitigation Measures for the School. Copies of the NSM inventory form and the presentation were distributed to the team members before the presentation. *Attached: Presentation & Inventory Form*
3. A brief on the ongoing activities of the project was given by Mr. Hari immediately after the presentation.
4. This was followed by discussions and feedback from participants. Room wise discussions were held and there were recommendations from the team.;
 - a. **DOORS:** The team suggested that there should be two doors per room. A common opinion was that, it would be better to have an extra door instead of spending money on making the existing door to open outwards. This extra door would open in outward direction.
 - b. **MAIN HALL:** Concern was shown for the main hall, as it occupies around 2000 students at one time and there are only two doors. Also the ceiling is in a very bad condtion.The fans are expected to fall due to the poor ceiling. The team recommended that for the main hall the ceiling should be replaced. Also more doors should be added to the hall. They have requested the project team to recommend this to Public Works Department.
 - c. **AWARENESS PROGRAMMES:** From the discussions it emerged that their was a need of an awareness programme for school children. This may be an orientation session, followed by a movie on earthquakes. Also Mock drills should be organised for the school.
5. **Next Steps:**
 - a. Minutes of meeting to be sent to the Divisional Commissioner. The school will prepare the minutes, SEEDS will send their comments and the principal will send them to Mr. G.K. Marwa. He will then be requested to put the issues further with Public Works Department. (Regarding the Building Content).

- b. On the basis of recommendations, SEEDS to prepare a list of devices to be used for fastening the Non structural elements. Also a budget will be prepared and share it with the Advisory team. The scope of implementation will be decided then.
- c. A survey to be organised with the engineers to seek their advice on the structural aspects related to NSM. SEEDS to coordinate for the same with Hari. From the survey issues regarding the electrical equipment, doors, ceiling will be resolved.
- d. Awareness Campaign will be organised in the first week of July.
- e. The school will follow up to get the fire extinguishers refilled. Then a fire training will be organised for the staff and students.

ROUGH COST ESTIMATE FOR PROPOSED NON-STRUCTURAL MITIGATION WORK
AT LUDLOW CASTLE SCHOOL

Total Estimated Cost for NSM work in school

Cost for Demonstration Area (Principal's Room)	1,811
Cost for High Priority	29,311
Cost for Medium Priority	31,300
TOTAL SCHOOL COST	62,421

BUDGET FOR PHYSICS LAB

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority H/M/L or 1,2,3	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
3 IRON CABINET (3' x 5.5')	L – BRACKETS	10 PER PIECE	12	H	120	
3 WOODEN CABINET (3' x 6')	L – BRACKETS	10 PER PIECE	12	H	120	
	GLASS FILM	10.5 PER SQ. FOOT	30 SQ FEET	H	315	
	MAGNETIC CATCHERS	6 PER PIECE	6	H	36	
1 LPG CYLINDER	CHAIN	10 PER FOOT	3 FEET	H	30	
22 WALL HANGINGINGS PHOTOGRAPH	HOOKS AND VELCRO	6 PER HANGING	22	H	132	
3 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	9 FEET	H		90
1BAROMETER				M		
MISCELLANEOUS					100	
LABOUR CHARGES					400	200
TOTAL COST 1550					1160	390

BUDGET FOR LIBRARY

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
8 IRON CABINET (3.5' x 6')	L – BRACKETS	10 PER PIECE	24	h	240	-
25 WOODEN CABINET (3' x 6.4')	L – BRACKETS	10 PER PIECE	100	h	1000	
	GLASS FILM	10.5 PER SQ. FOOT	250 SQ. FEET	h	2625	
	MAGNETIC CATCHERS	6 PER PIECE	50	h	300	
4 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	20 FEET	h	200	
MISCELLANEOUS					200	
LABOUR CHARGES					1800	
TOTAL					6365	-

BUDGET FOR PRIMARY TEACHERS STAFF ROOM

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
12 CABINET (3.5' x 6')	L – BRACKETS	10 PER PIECE	48	h	480	-
MISCELLANEOUS				h	100	-
LABOUR CHARGES				h	600	-
TOTAL					1180	-

BUDGET FOR EXAMINATION ROOM

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority
7 IRON CABINET (3.5' x 6')	L – BRACKETS	10 PER PIECE	28	h	280	-
MISCELLANEOUS				h	100	-
LABOUR CHARGES				h	900	-
TOTAL					1280	-

BUDGET FOR STAFF ROOM NO.1

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority
4 IRON CABINET (3.5' x 6')	L – BRACKETS	10 PER PIECE	16	h	160	-
MISCELLANEOUS					100	-
LABOUR CHARGES					1200	-
TOTAL					1460	

BUDGET FOR STAFF ROOM NO.2

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	AMOUNT (Rs.)	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority)
9 RON CABINET (3.5' x 6')	L – BRACKETS	10 PER PIECE	36		h	360	
Clock					m		50
HOT CASE	STRAPS AND CLIPS						
Water tank	-						
MISCELLANEOUS						100	
LABOUR CHARGES						1100	100
TOTAL						1510	150

BUDGET FOR VKS ROOM

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	AMOUNT (Rs.)	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority)
2 IRON CABINET	L – BRACKETS	10 PER PIECE	8		h	80	
3 WOODEN CABINET	L – BRACKETS	10 PER PIECE	12		h	120	
	MAGNETIC CATCHERS	6 PER PIECE	6		h	36	
MISCELLANEOUS						100	
LABOUR CHARGES						600	
TOTAL						936	-

BUDGET FOR CHEMISTRY LAB

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	AMOUNT (Rs.)	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority
2 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	6 FEET		h	60	
4 GAS CYLINDERS	CHAIN	10 PER FOOT	12 FEET		h	120	
MISCELLANEOUS					h	100	
LABOUR CHARGES						300	
TOTAL						580	-

BUDGET FOR BIO LAB

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority
6 CABINET	L – BRACKETS	10 PER PIECE	24	h	240	
	GLASS FILM	10.5 PER SQ. FOOT	60 SQ. FEET	h	630	
1 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	4 FEET	h	40	
EXHIBIT & DISPLAY	HOOKS. SCREWS & VELCRO			h		
MISCELLANEOUS					100	-
LABOUR CHARGES					1200	
TOTAL					2210	

BUDGET FOR COMPUTER ROOM

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority)	AMOUNT (Rs.) FOR MEDIUM priority
2 CABINET	L – BRACKETS	10 PER PIECE	8	h	80	
20 COMPUTER			4	h		
	VELCRO	5 PER FOOT	2 FEET LENGTH	m		1000
2 ups	STRAPS AND CLIPS			m		
MISCELLANEOUS					100	
LABOUR CHARGES					100	200
TOTAL					380	1200

BUDGET FOR MAIN MEETING HALL

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
6 SPEAKERS	STRAP AND CLIPS		12	m		100
6 PICTURES	HOOKS AND VELCRO				100	
NEW DOOR OPENING					8,000	
MISCELLANEOUS					200	
LABOUR CHARGES					1800	200
TOTAL					10,600	300

BUDGET FOR OFFICE ROOM NO.1

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
12 CABINET (3.5' X 6')	L – BRACKETS	10 PER PIECE	48	h	480	
1 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	6 FEET	m		60
POWER BOX	CHAIN	10 PER FOOT		m		200
COMPUTER	STRAPS AND CLIPS		4			
	VELCRO	5 PER FOOT	2 FEET LENGTH	h	10	
MISCELLANEOUS					100	
LABOUR CHARGES					800	100
TOTAL					1390	360

BUDGET FOR CORRIDORS

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	Priority	AMOUNT (Rs.) FOR High priority	AMOUNT (Rs.) FOR MEDIUM priority
4 CABINET	L – BRACKETS	10 PER PIECE	16	h	160	
24 FIRE EXTINGUISHERS	CHAIN	10 PER FOOT	6 FEET	h	60	
POWER BOX	CHAIN	10 PER FOOT		m		500
13 DISPLAY BOARDS AND PICTURES	HOOKS. SCREWS VELCRO			h	200	
60 DOOR OPENINGS	WOODEN FRAME	400	60	m		24,000
	HINGES					
MISCELLANEOUS					600	400
LABOUR CHARGES					1000	4000
Total					1420	28900

NON-STRUCTURAL MITIGATION OF BUILDING CONTENTS

DEMONSTRATION WORK CARRIED OUT
IN PRINCIPAL'S ROOM
AT LUDLOW CASTLE SCHOOL

DEMONSTRATION OF Non-Structural Mitigation of Building Contents

Principal Room, Ludlow Castle School

Wooden cabinet (not fixed to the wall) – 8' x 8'

- Anchoring using angles - 7 nos.
- Screwing the back of the cabinet to the wall provided with rubber padding – 4 nos.
- Non – slip shelf mats
- Glass film on outer surface of glass panels
- Repairing of shutter & replacement of magnetic catcher

Iron file cabinet – 5.5' x 3'

- Anchoring using L-Brackets – 4 nos.
- Glass film on outer surface of glass panels
- Change of position

Iron cabinet – 6.5' x 3'

- Anchoring using angles – 4 nos.

Iron cabinet – 6.5' x 3'

- Anchoring using L-Brackets – 5 nos.

Computer

- Anchoring of monitor using straps & clips
- Anchoring of CPU Cabinet & UPS using adhesive Velcro
- Change of position
- Secured using Velcro with adhesive on both sides.
- Screwing of Velcro to the wall

Display board

- Secured with screws – 8 nos.

Doors

- Provision of stopper

WOODEN CABINET

Risk Of life safety due to
faling of Wooden Cabinet



Attached L - Brackets with cabinet



Measurement for shelf mats



Using EVA sheet as shelf mats



IRON FILE CABINET

Book Shelf Blocking
Bathroom exit



Exit cleared



Bookshelf repositioned



IRON CABINET

Anchoring of iron cabinet to the wall using L- Brackets



COMPUTER

Securing the computer using Straps and Clips. Velcro is used for the cabinet and UPS



WALL CLOCK

Securing the wall clock using hook and Velcro



DISPLAY BOARD

Board is screwed to the wall for further safety



COST ESTIMATE FOR PRINCIPAL'S ROOM

ITEM DESCRIPTION	DEVICE TYPE	RATE (Rs.)	QUANTITY	AMOUNT (Rs.)
IRON CABINET (3' x 5.5')	L – BRACKETS	10 PER PIECE	4	40
	GLASS FILM	10.5 PER SQ. FOOT	9 SQ. FEET	95
2 IRON CABINET (3' x 6.5')	L – BRACKETS	10 PER PIECE	4	40
WOODEN CABINET (8' x 8')	L – BRACKETS	10 PER PIECE	7	70
	SHELF MATS	2.5 PER SQ. FOOT	24 SQ. FEET	60
	GLASS FILM	10.5 PER SQ. FOOT	28 SQ. FEET	300
	MAGNETIC CATCHERS	6 PER PIECE	10	60
	HANDLES		10	
FIXED WOODEN CABINET (7' x 8')	SHELF MATS	2.5 PER SQ. FOOT	40 SQ. FEET	100
	GLASS FILM	10.5 PER SQ. FOOT	28 SQ. FEET	300
	MAGNETIC CATCHERS	6 PER PIECE	6	36
COMPUTER	STRAPS AND CLIPS		4	
	VELCRO	5 PER FOOT	2 FEET LENGTH	10
MISCELLANEOUS				100
LABOUR CHARGES				600
TOTAL				1811

