

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt. Girls High School , Killi Kateer Kuchlak, Quetta

| Sr.No | Description of Items | QUANTITY | UNIT | RATES (Rs) | AMOUNT |
|-------|--|----------|------|------------|--------|
| C1 | Dismantling works | | | | |
| 1 | Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor. | 230 | SFT | | |
| 2 | Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors. | 1500 | SFT | | |
| 3 | Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chipped and cleaning of surfaces. | 1500 | SFT | | |
| 4 | Excavation in foundation of buildings,bridges and other structures, depth upto 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m. | 20 | CFT | | |
| | Sub-total of C1 | | | Total | |
| C2 | Rehabilitation and Restoration works | | | | |
| 1 | Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor. | 64 | CFT | | |
| 2 | Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer. | 10 | RFT | | |
| 3 | Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stitching dogs covering with thin layer of cement plaster as per instruction of Engineer. | 10 | RFT | | |
| 4 | The damaged crushed concrete or honey combing in concrete of columns, footing, fountation, beams and walls, are to be repaired by removing the crushed concrete in the area and re-concreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer. | 150 | SFT | | |
| 5 | Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer. | 1400 | SFT | | |
| | Sub-total of C2 | | | Total | |
| C3 | Seismic Retrofitting works | | | | |
| 1 | Footing and Tie Beam | | | | |
| 1.1 | Providing and laying cement concrete (1:1.5:3)using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer. | 20 | SFT | | |
| 1.2 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 1 | TON | | |

| | | | | | |
|-----|--|------|-----|--------------------|--|
| 2 | Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints | | | | |
| 2.1 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 2 | TON | | |
| 2.2 | Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars. | 200 | RFT | | |
| 2.3 | Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer. | 1400 | SFT | | |
| | Sub-total of C3 | | | Total | |
| C4 | Finishing works | | | | |
| 1 | Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame. | 20 | Nos | | |
| 2 | White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor. | 4000 | SFT | | |
| | Sub-total of C4 | | | Total | |
| | Total C1+C2+C3+C4 | | | Grand Total | |

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

GGPS Mission Road

| Sr.No | Description of Items | QUANTITY | UNIT | RATES (Rs) | AMOUNT |
|-------|---|----------|------|------------|--------|
| C1 | Dismantling works | | | | |
| 1 | Removing loose material of concrete of any thickness from ceiling, walls, floor, beams and columns, brushing and cleaning with solution of caustic soda the surface of brick masonry and concrete preparing of surfaces ,levelling as per instruction of the Engineers and disposing of the rubbish in any floor. | 240 | SFT | | |
| 2 | Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors. | 3000 | SFT | | |
| 3 | Dismantling brickwork in lime or cement mortar upto 9" width | 1300 | SFT | | |
| 4 | Excavation in foundation of buildings,bridges and other structures, depth upto 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m. | 60 | CFT | | |
| | Sub-total of C1 | | | Total | |
| C2 | Rehabilitationa and Restoration works | | | | |
| 1 | Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer. | 30 | CFT | | |
| 2 | Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels, slabs and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor. | 1300 | CFT | | |
| 3 | Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor. | 20 | CFT | | |
| 4 | Providing and laying 1:2:4 cement concrete floor using using crushed aggregate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing. | 720 | CFT | | |
| 5 | Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer. | 10 | RFT | | |
| 6 | Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stiching dogs covering with thin layer of cement plaster as per instruction of Engineer. | 10 | RFT | | |
| 7 | The damaged crushed concrete or honey combing in concrete of columns, footing, fountation, beams and walls, are to be repaired by removing the crushed concrete in the area and reconcreting with rich mix of concrete grout with Sikacrete 114 as per instruction of Engineer. | 20 | SFT | | |
| 8 | Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer. | 2000 | SFT | | |
| | Sub-total of C2 | | | Total | |

| | | | | | |
|-----|--|------|-----|-------------|--|
| C3 | Seismic Retrofitting works | | | | |
| 1 | Footing and Tie Beam | | | | |
| 1.1 | Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer. | 30 | SFT | | |
| 1.2 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 1.5 | TON | | |
| 2 | Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints | | | | |
| 2.1 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 2 | TON | | |
| 2.2 | Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars. | 100 | RFT | | |
| 2.3 | Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer. | 600 | SFT | | |
| | Sub-total of C3 | | | Total | |
| C4 | Finishing works | | | | |
| 1 | Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame. | 5 | Nos | | |
| 2 | White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor. | 1500 | SFT | | |
| | Sub-total of C4 | | | Total | |
| | Total C1+C2+C3+C4 | | | Grand Total | |

Detailed Estimate of Rehabilitation and Seismic Retrofitting of School and BHU Structures (RAPID)

Govt. Boys Primary School , Killi Kateer Kuchlak, Quetta

| Sr.No | Description of Items | QUANTITY | UNIT | RATES (Rs) | AMOUNT |
|-------|--|----------|------|------------|--------|
| C1 | Dismantling works | | | | |
| 1 | Dismantling of RCC beam/columns/slab (Slab upto 6" thick) in panels using anti-vibration technique with antivibrant core cutting, necessary scaffolding and jacking arrangement, and including separating reinforcement from concrete, shifting debris within distance of one chain (30.5 m), complete in all respect, as per drawings and instructions of the Engineer in charge. | 1200 | SFT | | |
| 2 | Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including, removal of rubbish in all floors. | 1370 | SFT | | |
| 3 | Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor and chipped and cleaning of surfaces. | 2515 | SFT | | |
| 4 | Excavation in foundation of buildings,bridges and other structures, depth upto 4 meters including dag bellings dressing,refilling around structures with excavated earth, watering and ramming lead upto 30 m lift up to 1.5 m. | 34 | CFT | | |
| | Sub-total of C1 | | | Total | |
| C2 | Rehabilitation and Restoration works | | | | |
| 1 | Providing and laying plain machine mixed cement concrete 1:2:4 using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing as per instruction of engineer. | 22.5 | CFT | | |
| 2 | Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor. | 180 | CFT | | |
| 3 | Providing and laying 1:2:4 cement concrete floor using using crushed aggregate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing plaster and curing. | 1250 | CFT | | |
| 4 | Repair of small crack in walls, floor, beams and columns by chiesel out the crack using wire brush or portable drill with wire arrangement and apply rich mortar (1:2) with thin layer of rich cement slurry over lay or by some epoxies (LSR grouting through injection) as per instruction of Engineer. | 10 | RFT | | |
| 5 | Repair of major crack in walls, floor by chiesel out the crack using wire brush or portable drill with wire arrangement and drilling holes in both sides of the crack and grouting in U shaped metal units with short legs called staples or stitching dogs covering with thin layer of cement plaster as per instruction of Engineer. | 10 | RFT | | |
| 6 | Cement plaster (1:3) using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, walls and columns in basement, plinth and ground floor including making edges, corners and curing as per intstruction of engineer. | 2700 | SFT | | |
| | Sub-total of C2 | | | Total | |

| | | | | | |
|--------------------------|--|------|-----|--------------------|--|
| C3 | Seismic Retrofitting works | | | | |
| 1 | Footing and Tie Beam | | | | |
| 1.1 | Providing and laying cement concrete (1:1.5:3) using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation, ground floor, including leveling compacting and curing and plaster using cement slurry (1:3) as per instruction of engineer. | 18 | SFT | | |
| 1.2 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 1.5 | TON | | |
| 2 | Beam/Column and Joint Jacketing and Horizontal Bandages and Vertical Splints | | | | |
| 2.1 | Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 30 ft. height | 1.5 | TON | | |
| 2.2 | Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars. | 150 | RFT | | |
| 2.3 | Providing and laying 1.5" microconcrete (1:1.5:3) using Sikacrete 114 with appropriate design mix using sand and fine and crushed aggregate at wall, columns, beams and finished with 1/2" thick cement plaster 1:3 including curing as per instruction of Engineer. | 1265 | SFT | | |
| Sub-total of C3 | | | | Total | |
| C4 | Finishing works | | | | |
| 1 | Providing and fixing glass panes of the following types in wooden or steel frames of doors, windows, ventilators etc complete in all respect including wooden gola beading in any floor, ceiling, wooden notice board with frame. | 8 | Nos | | |
| 2 | White Wash of All School BHUs, & repair and retrofit finished work of approved shade in two or more coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor. | 3000 | SFT | | |
| Sub-total of C4 | | | | Total | |
| Total C1+C2+C3+C4 | | | | Grand Total | |